

# User manual to install QB64 on Precise Pangolin

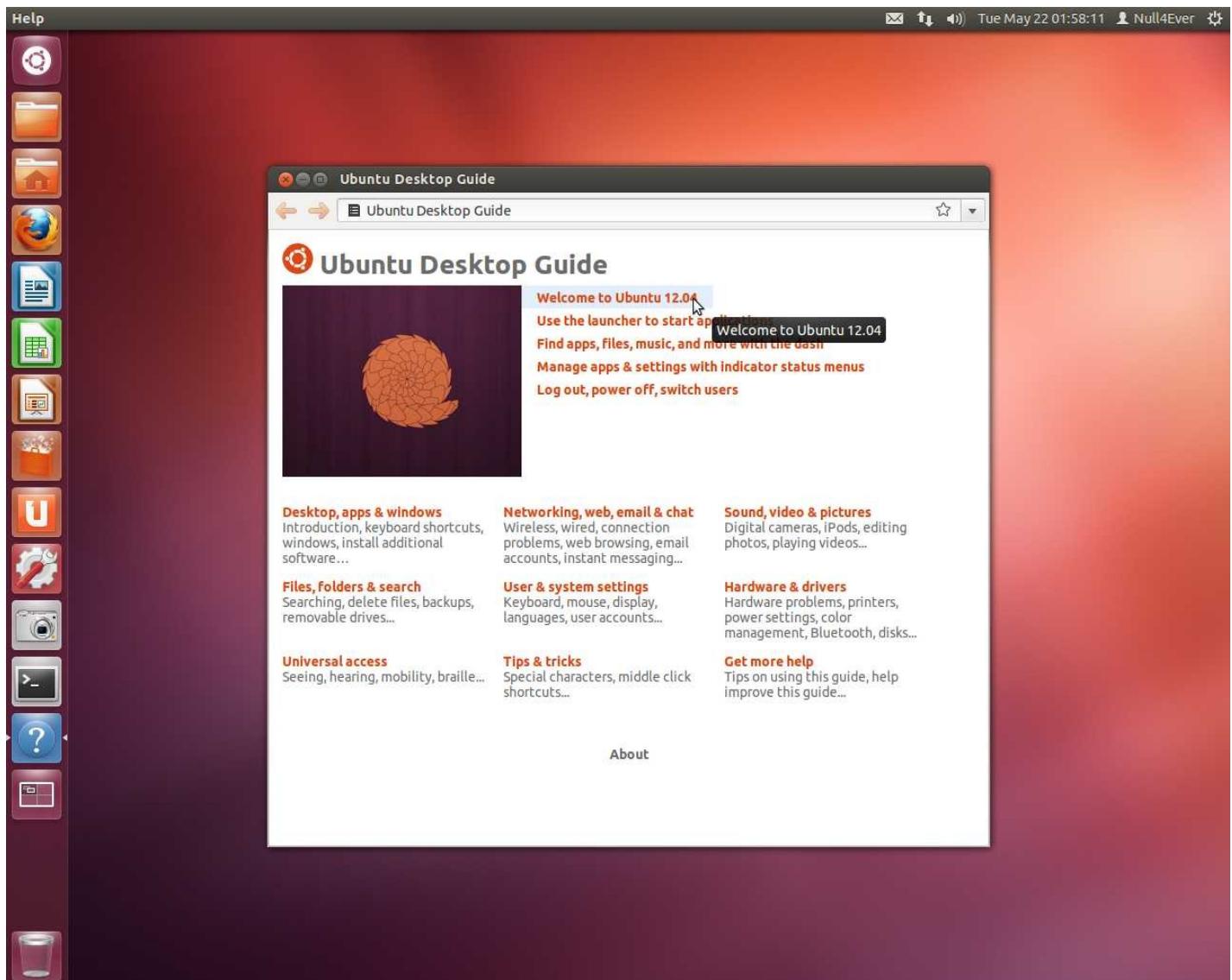
## Ubuntu 12.04 LTS

Hi all QB64 lovers.

I know a lot of people having problems to install Ubuntu 12.04 LTS, and when they succeed to do, they also encounter problems installing QB64.

This small tutorial should “try” to help those girls and guys (like me) who hate UNIX like command lines.

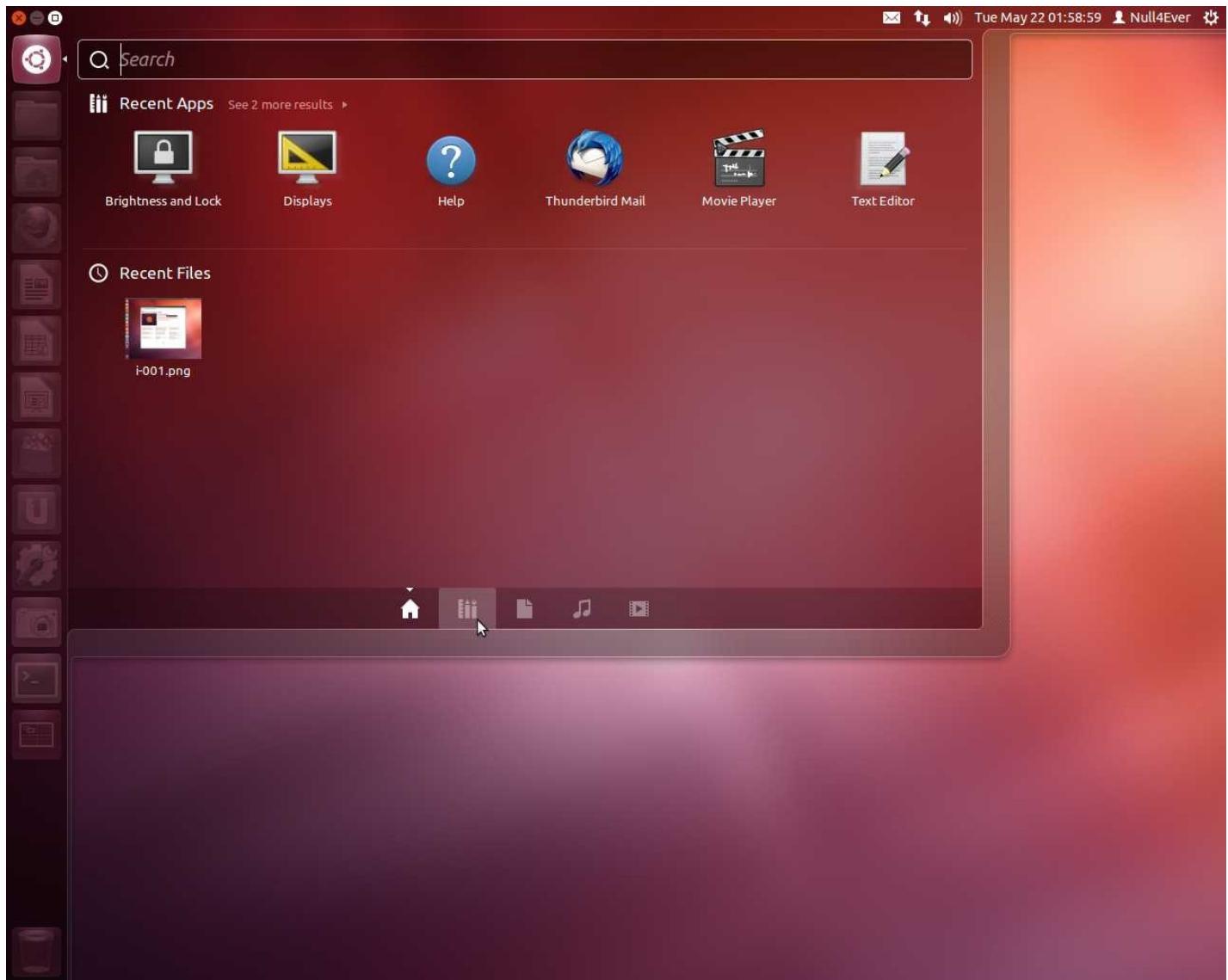
So, once you've achieved a fresh install of Precise Pangolin, you should get a screen like this:



After a fresh install, the first thing to do is to update your system !

Yes, it's like for Windows (LOL)! You just spent half an hour (or more) to install your OS, but then, you've to update it (even if in my personal case if I installed that latest version just right the day it was released -Been there, done that).

To do so (update your brandnew system), please open the “Dash” (you know, the top left icon of the purported vertical left “supposed to look” like an OS/X Dashboard or even a Windows 7 Taskbar) - Huge LOL.

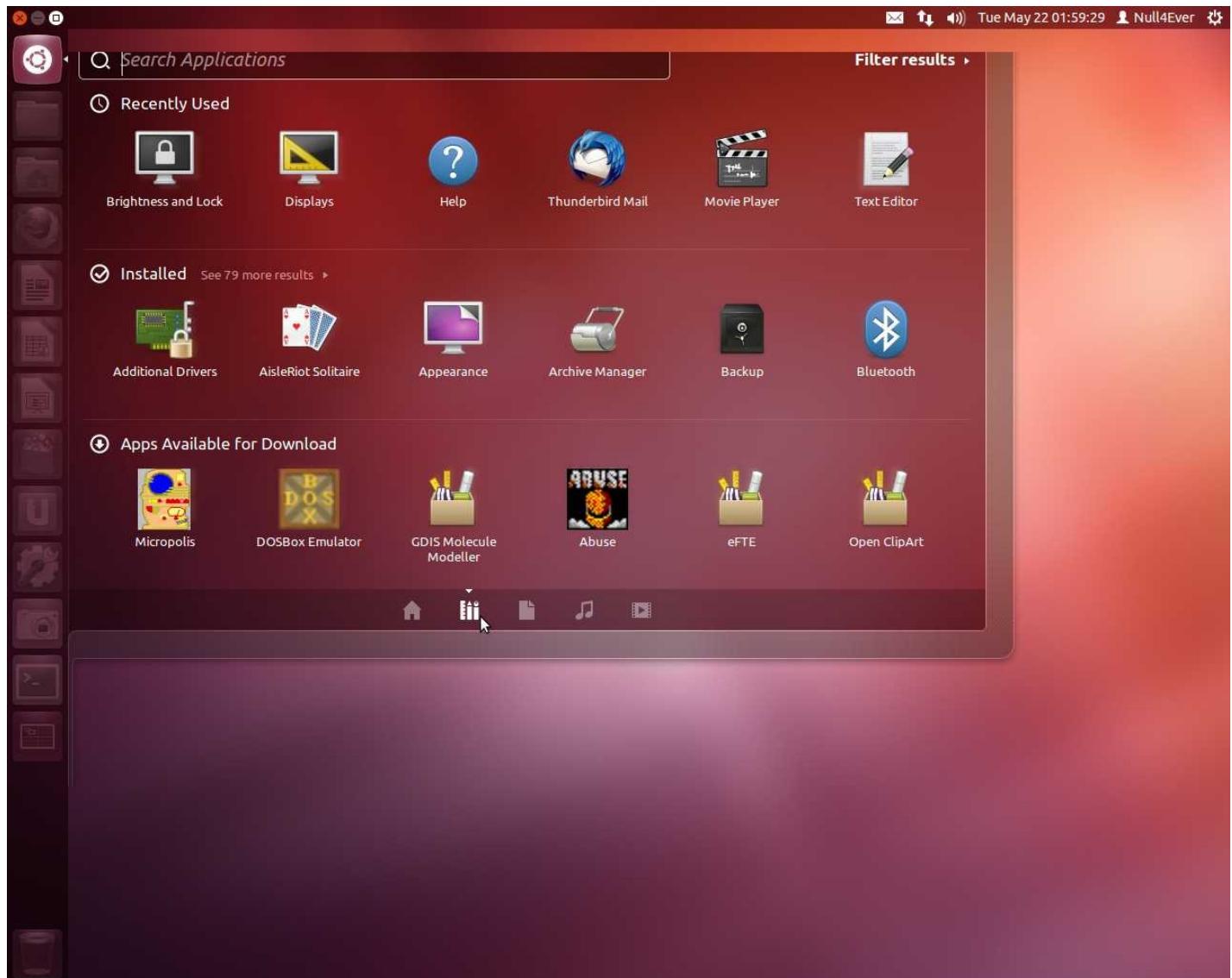


Then, click on the icon that is “supposed” to represent a “library”.



Even my eight year old son does better icon designs !

This will show a selection of the recently used apps, of the already installed apps as well as a selection of apps available for download.

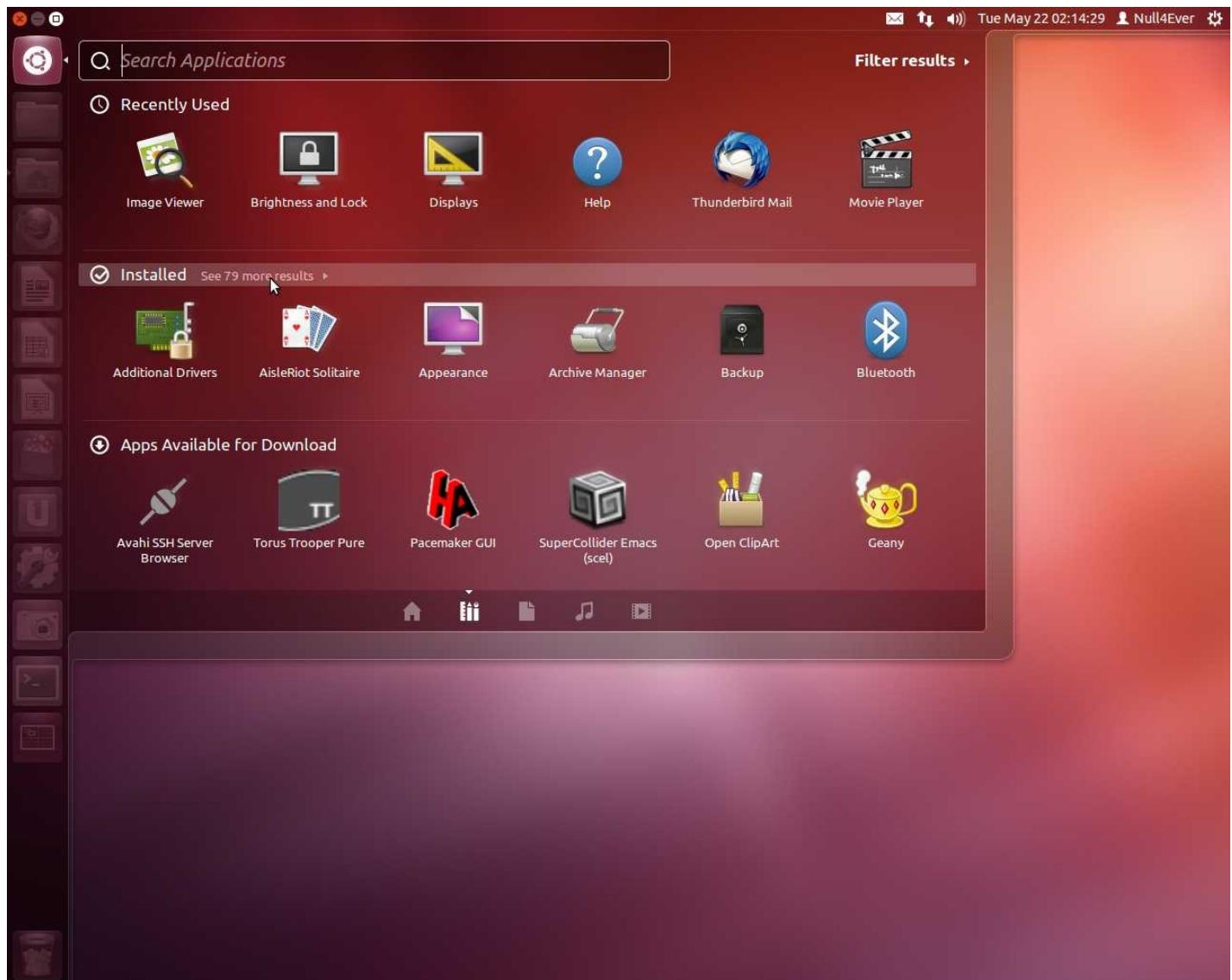


## Personal joke: Ubiquity?

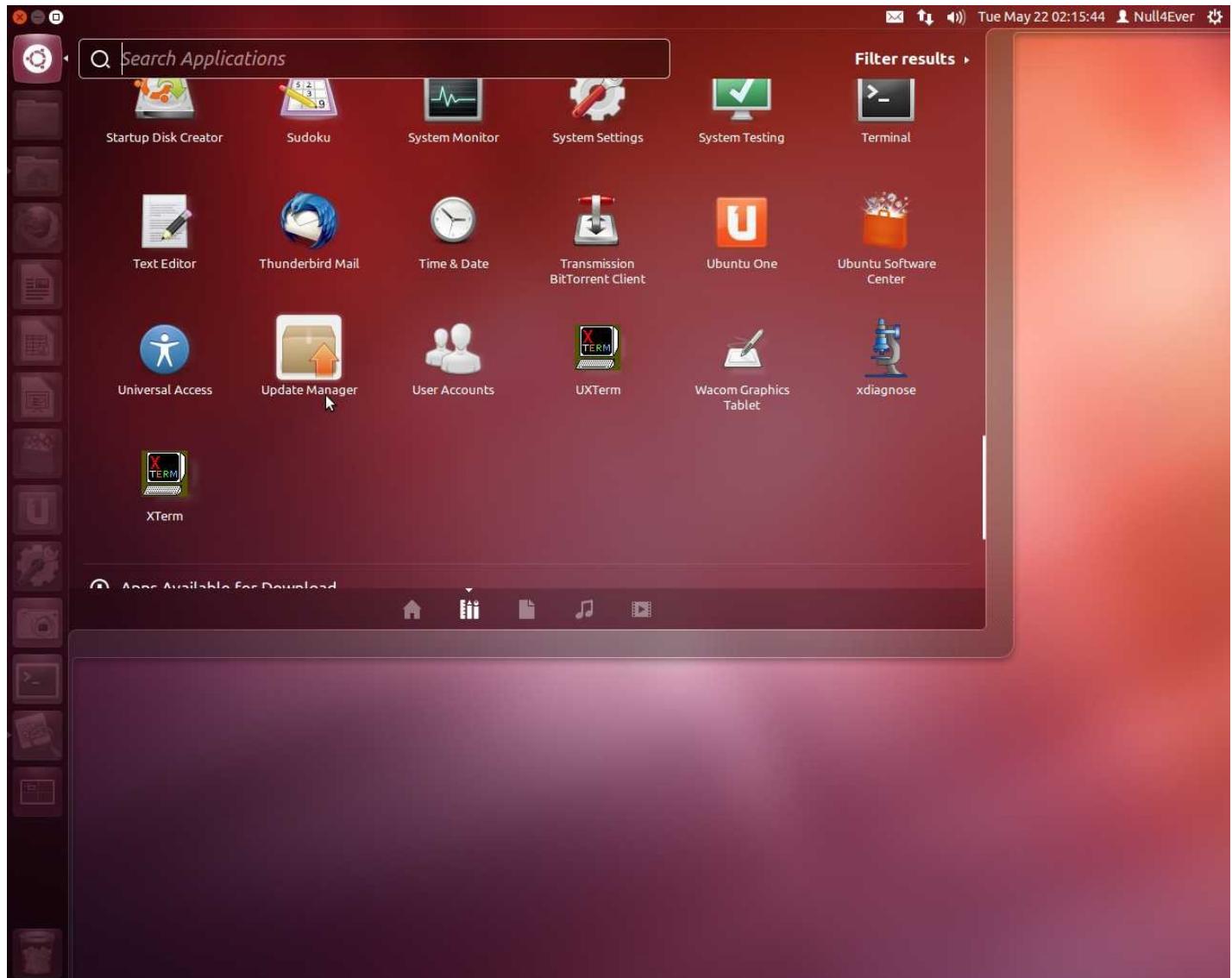
Whaoua !

This is a damned good new interface enhancement ... !

Aside my personal “troll” about this new interface, then click on the “Installed” option.



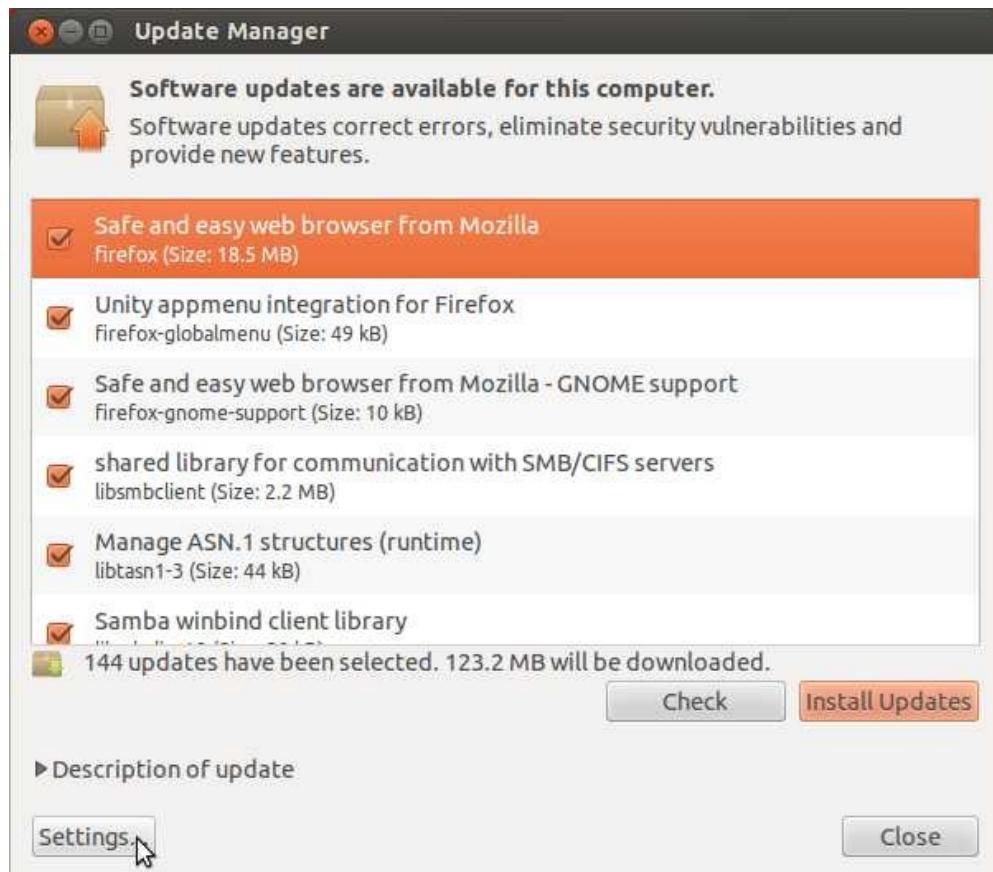
Then, scroll down to find the “Update Manager” app!



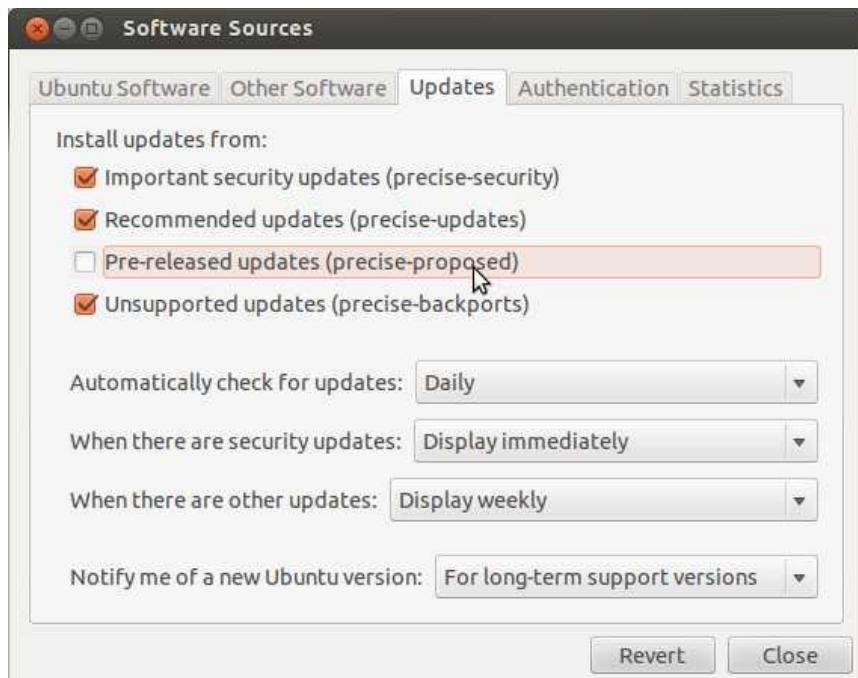
Then, start the Update Manager.



The Update Manager main dialog “should” look like this:



Then, click on the [Settings...] button that will open the following dialog.



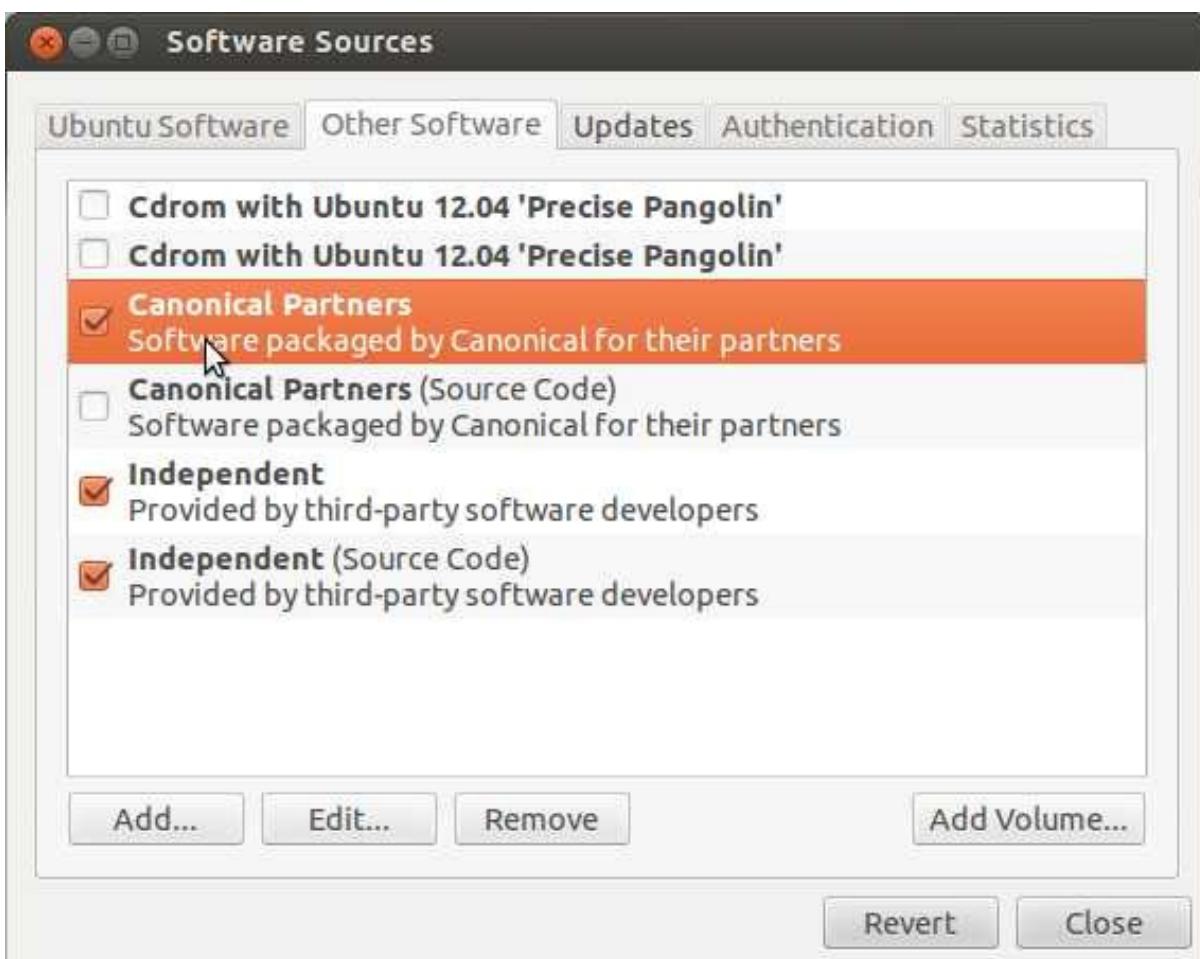
I fairly suggest that you enable the option “Pre-released updates (Precice-proposed)” to obtain some libraries not available (such as the libSDL-\* .dev suite) when this options isn’t enabled.

This action will request you password.

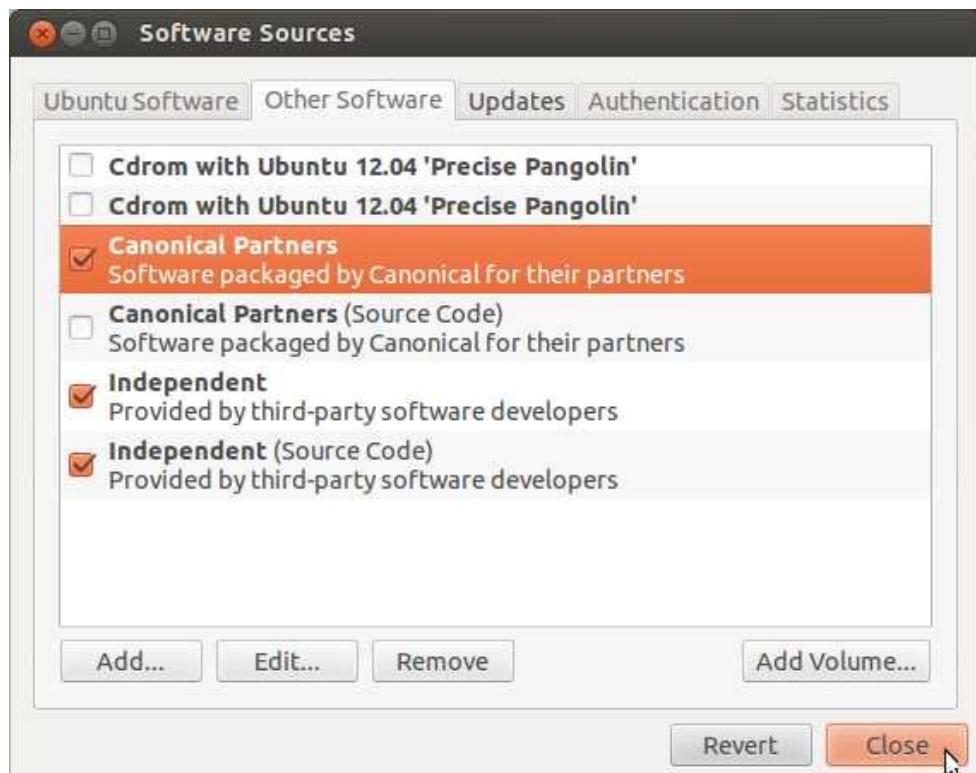


Enter your password and click on the [Authenticate] button.

Then, open the “Other Software” tab.



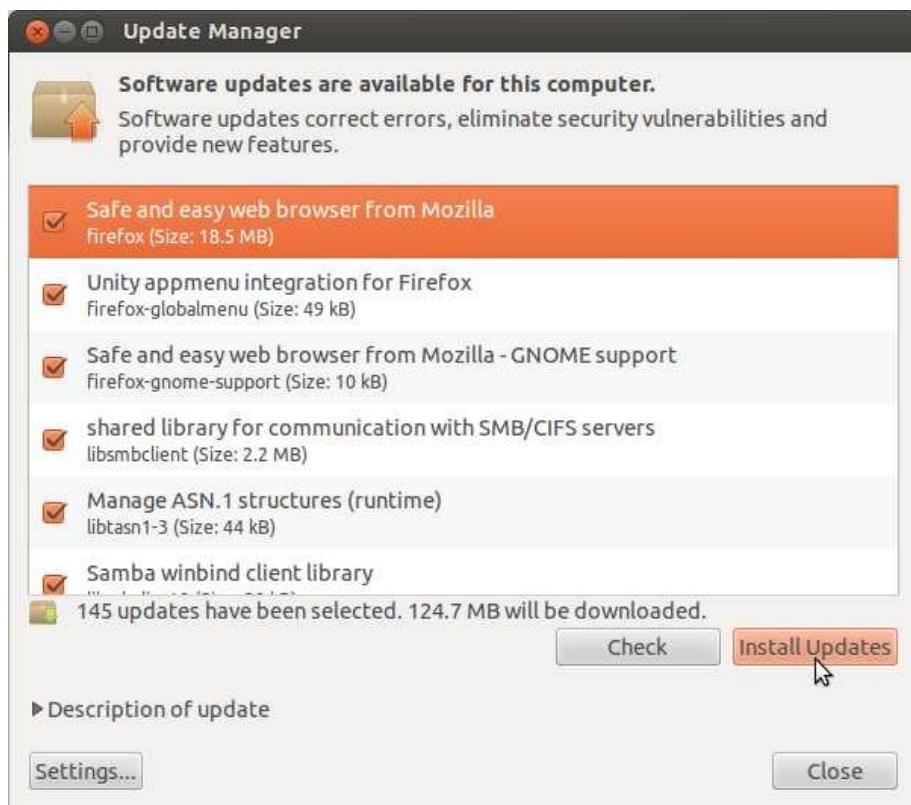
Please verify that the option “Canonical Partners” is enabled (and if you need the source code, validate the appropriate checkbox) and click on the [Close] button.



Once again, enter your password and click on the [Authenticate] button to proceed to the installation.

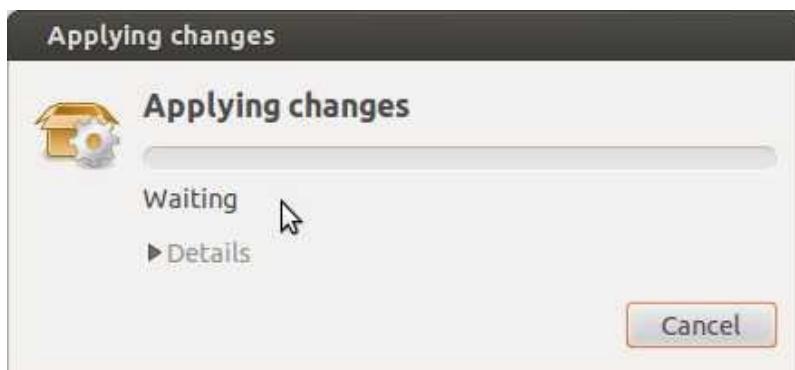


This will reload the list of packages to be installed (i.e. in my case, 145 new updates for 124.7 MB vs 144 for 123.2 MB previously to change the settings - And please don't even ask me what is the new update added to my prior list of updates and just trust the Update Manager - LOL)



Then, click on the [Close] button...

and ... WAIT !

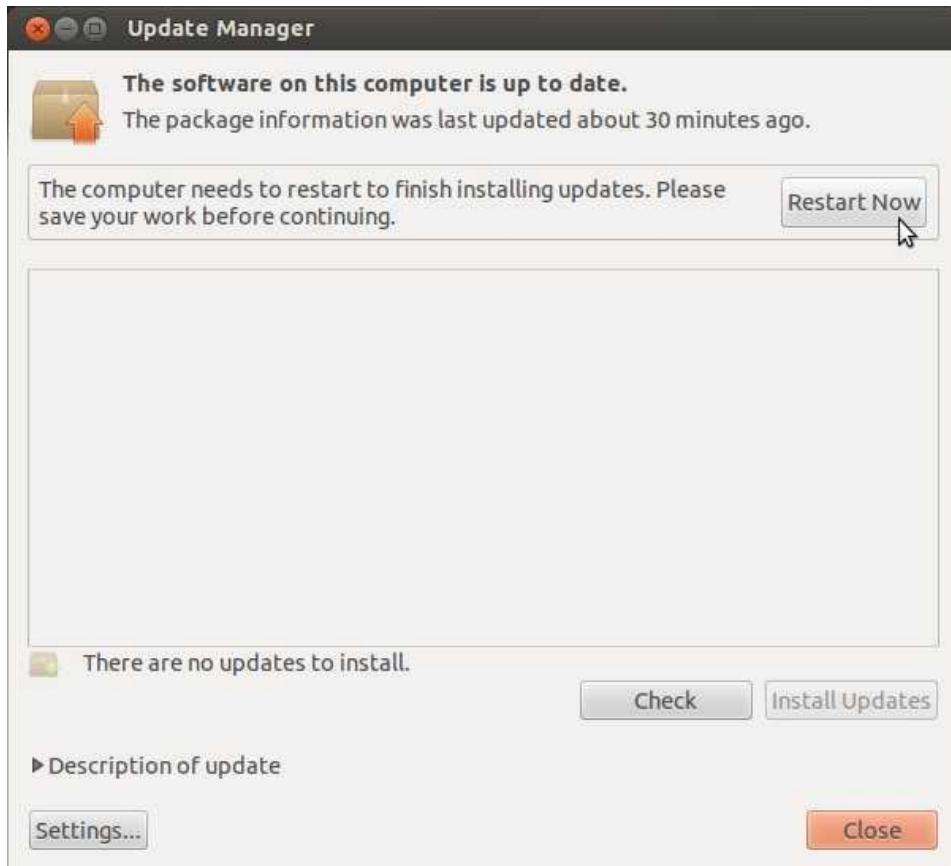


On my system at home, the process took approximately 30 minutes due to my “quite” low Internet connection speed (a DLS link with a purported download speed at 2 MB/s and a more purported upload speed of 0.5 MB/s)!

Thank you France Telecom for such a performance when you know that I've a 100 MB/s fiber cable in my village!

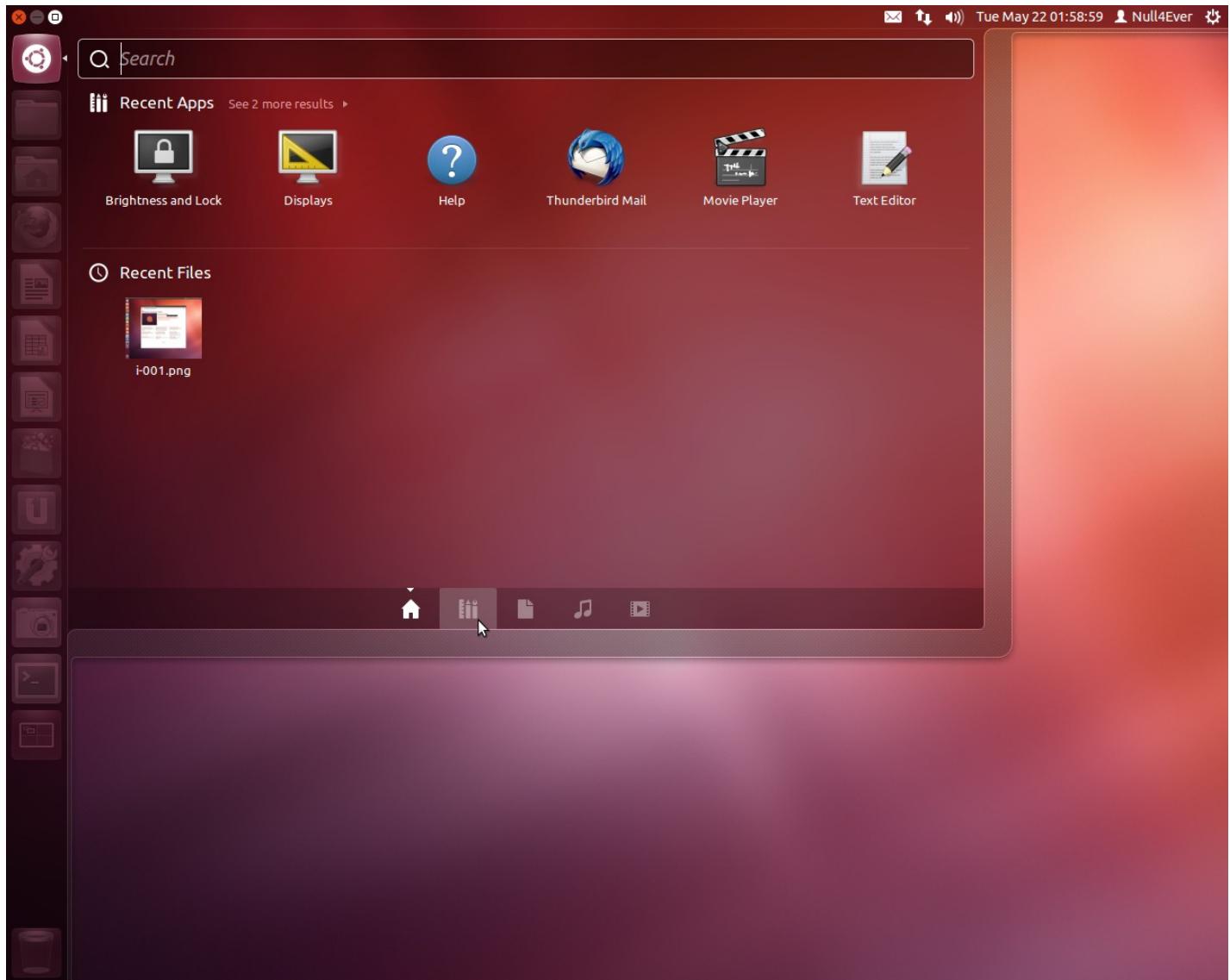
However, if you've only a modem 56 KB/s connection, please get out for a dinner, the go to a cinema to see a good movie, or even a long nap to repair yourself (or what you ever prefer to do - I even don't want to know - LOL)!

So, once all the upgrades are done, PLEASE reboot your system by clicking on the [Restart Now] button.



Now, your system is “supposed” to be updated with the last stuffs (if the update process didn’t mess-up your clean installation - Hey, keep cool, I’m joking, we’re not using ... Windows ... Even if some times I’ve serious doubts about the Canonical choices - Especially since the inception of the “Unity” interface of Ubuntu using GNOME 3! Big LOL)

So, after the reboot, please reopen the “DASH”

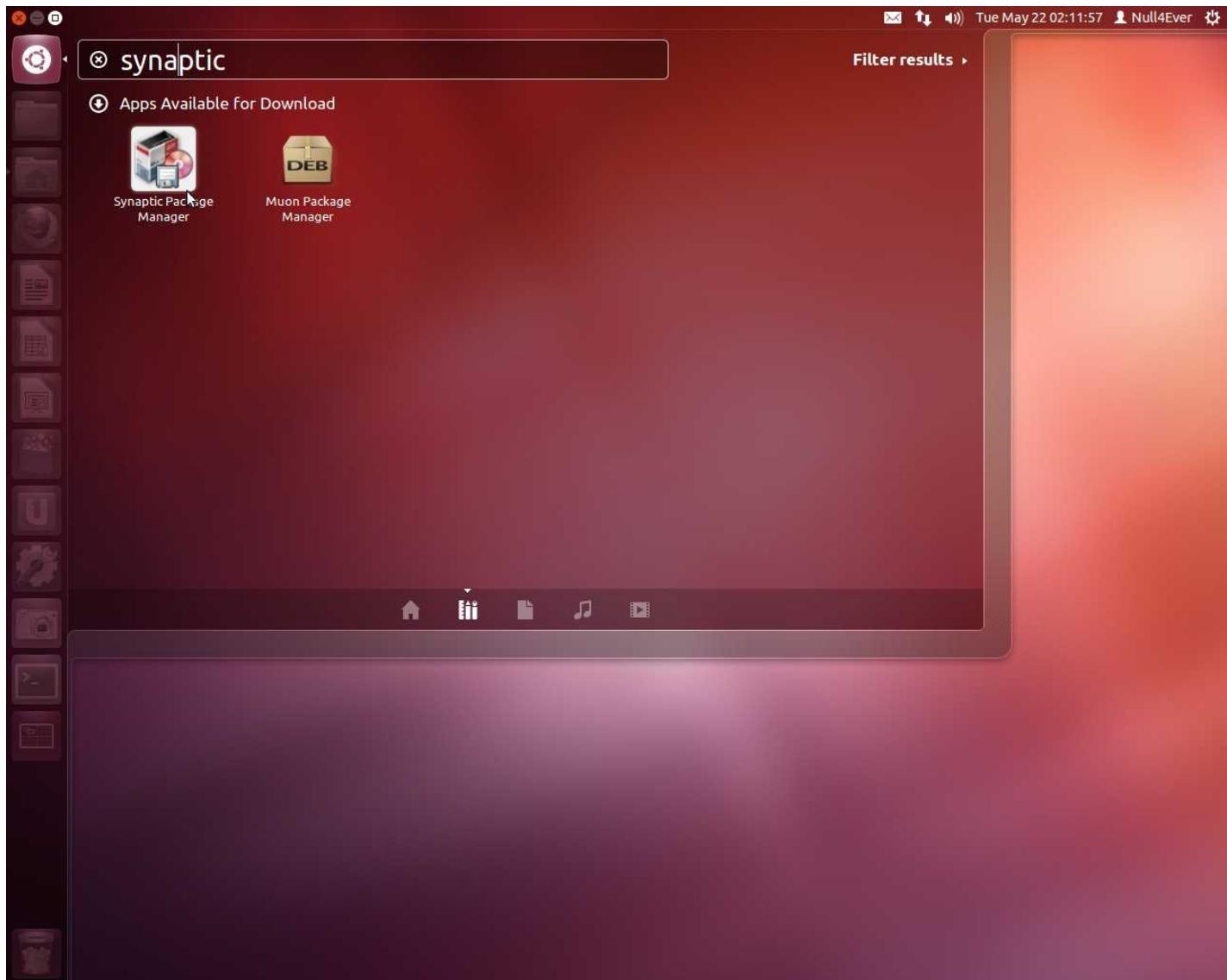


And select the “marvelous” library icon...



From there, we (you - LOL) are going to use the Synaptic Package Manager utility to install the components that QB64 needs to be usable (on a Linux distribution - Please don't ask me even what they're for Windows at this time - We'll see that later... later... later... when Windows will be gone as is currently QB and PDS - HUGE LOL)

So, once you've selected "once again the "library icon", please type the word "synaptic" into the entry field of the top of that "dialog panel".



Then, select the Synaptic Package Manager by clicking on the following icon:



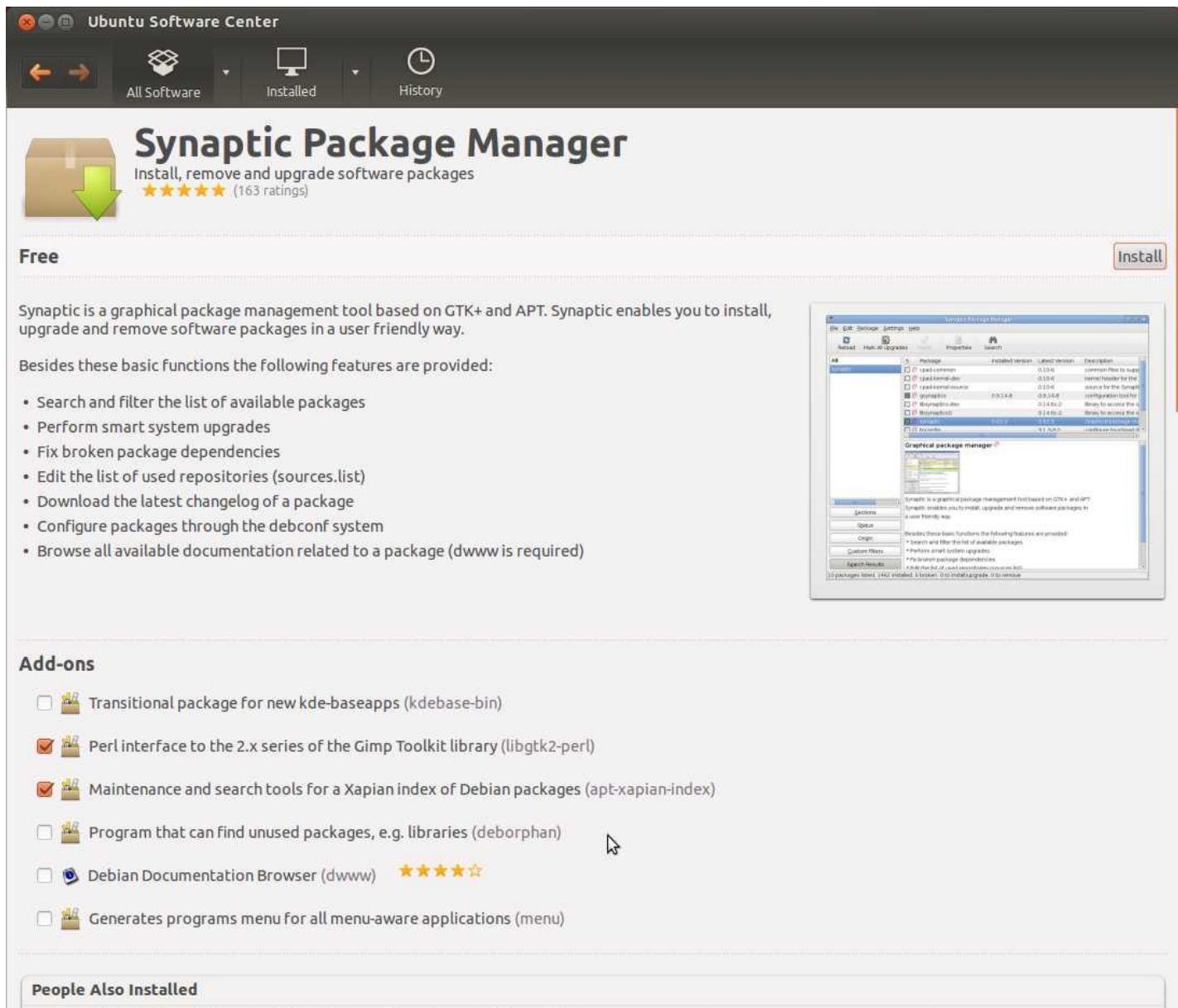
This new dialog allows you to download this utility (Thanks to Canonical, that was previously automatically installed with all prior releases!).

The screenshot shows the Ubuntu Software Center interface. At the top, there are tabs for 'All Software' (selected), 'Installed', and 'History'. Below the tabs, the title 'Synaptic Package Manager' is displayed with a subtitle 'Install, remove and upgrade software packages'. A rating of 4.5 stars from 163 reviews is shown. To the left is a graphic of a package with a green arrow pointing down. On the right, there is a large 'Install' button. Below the title, the word 'Free' is indicated. A brief description of Synaptic follows, mentioning it's a graphical package management tool based on GTK+ and APT, enabling users to install, upgrade, and remove software packages in a user-friendly way. It lists several features: search/filtering, smart upgrades, fixing dependencies, editing repositories, downloading changelogs, configuring through debconf, and browsing documentation. To the right of this text is a screenshot of the Synaptic Package Manager application window, which shows a list of packages and their details. Below the main content area is a section titled 'Add-ons' listing several related packages with checkboxes and ratings.

### Add-ons

- Transitional package for new kde-baseapps (kdebase-bin)
- Perl interface to the 2.x series of the Gimp Toolkit library (libgtk2-perl)
- Maintenance and search tools for a Xapian index of Debian packages (apt-xapian-index)
- Program that can find unused packages, e.g. libraries (deborphan)
- Debian Documentation Browser (dwww) ★★★★★
- Generates programs menu for all menu-aware applications (menu)

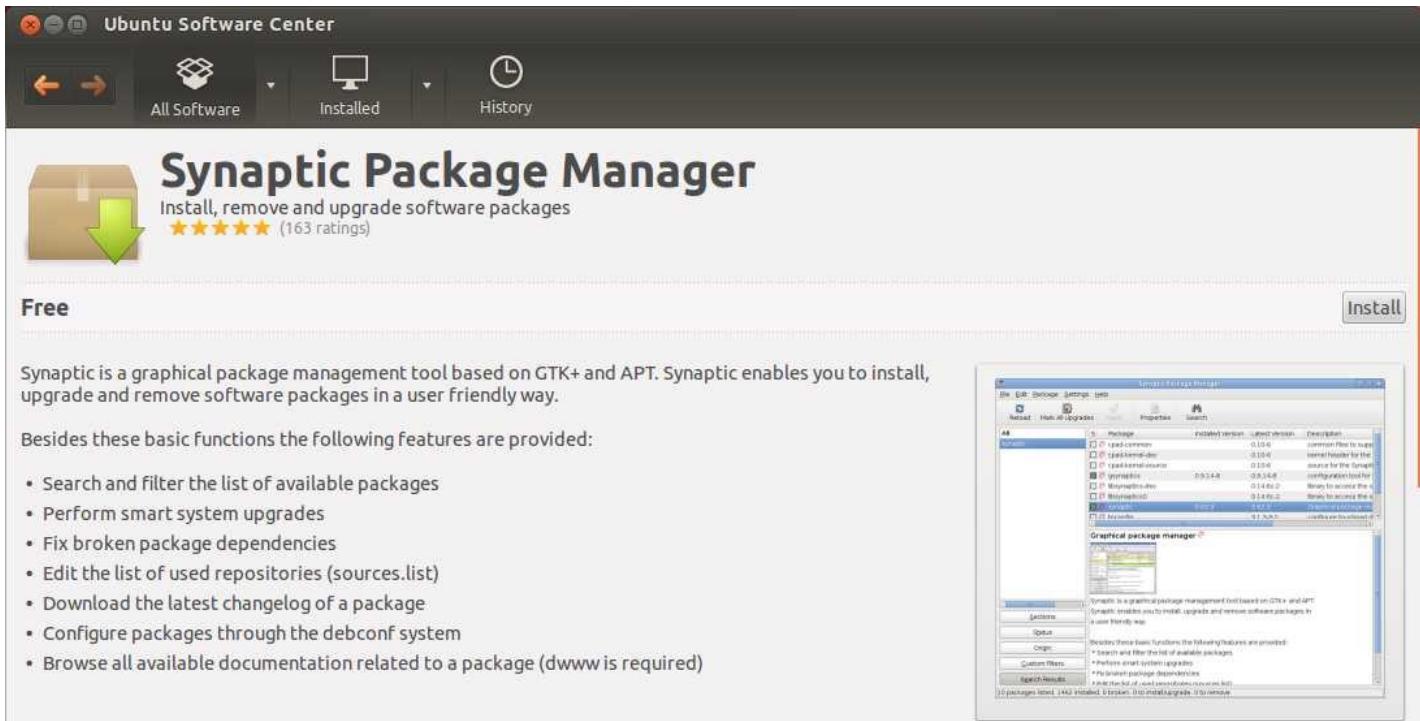
Then, the “Synaptic Package Manager” main dialog “should” look like this:



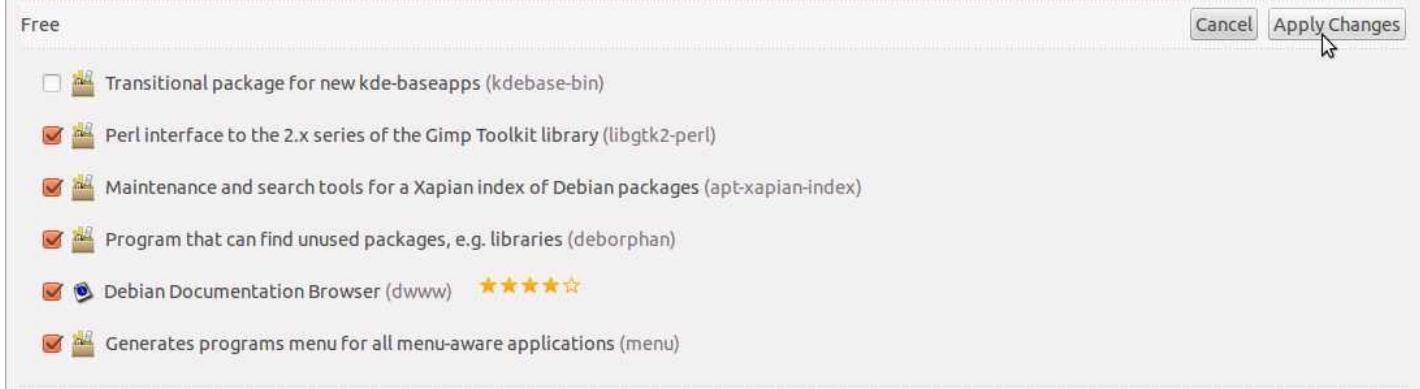
I suggest fairly that you enable the three options:

- Program that can find unused packages e.g. libraries (deborphan)
- Debian Documentation Browser (deborphan)
- Generates program menus for all menu aware application

Now, click on the [Apply Changes] button.



## Add-ons



Once the list is updated, you must once again authenticate yourself. Enter your password and click on the [Authenticates] button.



Then, click on the [Install] button.

**Synaptic Package Manager**  
Install, remove and upgrade software packages  
★★★★★ (163 ratings)

**Free**

Synaptic is a graphical package management tool based on GTK+ and APT. Synaptic enables you to install, upgrade and remove software packages in a user friendly way.

Besides these basic functions the following features are provided:

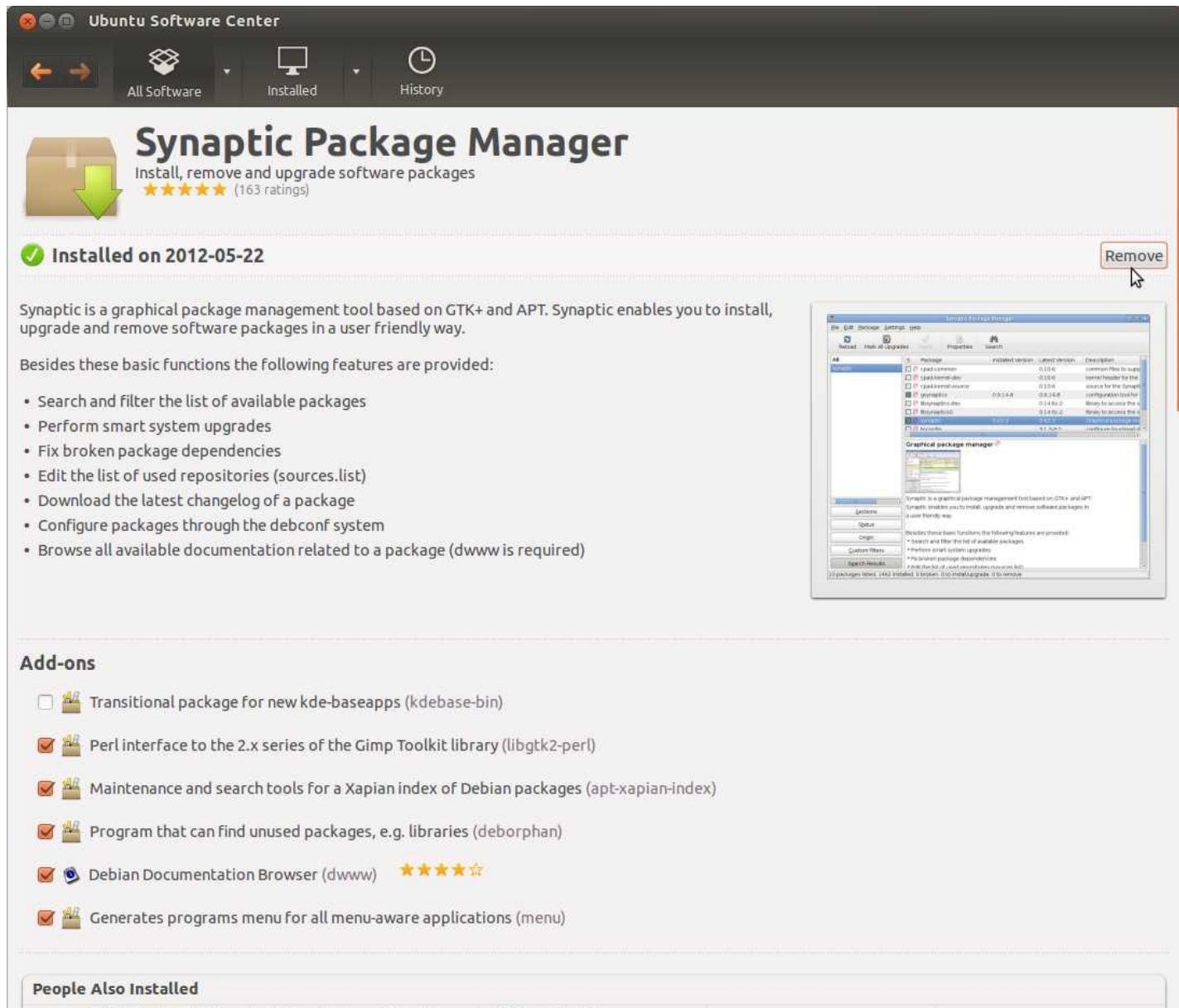
- Search and filter the list of available packages
- Perform smart system upgrades
- Fix broken package dependencies
- Edit the list of used repositories (sources.list)
- Download the latest changelog of a package
- Configure packages through the debconf system
- Browse all available documentation related to a package (dwww is required)

**Add-ons**

- Transitional package for new kde-baseapps (kdebase-bin)
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- Generates programs menu for all menu-aware applications (menu)

**People Also Installed**

Once the Synaptic Package Manager is installed (the [Install] button is now a [Remove] button), close the Ubuntu Software Center.



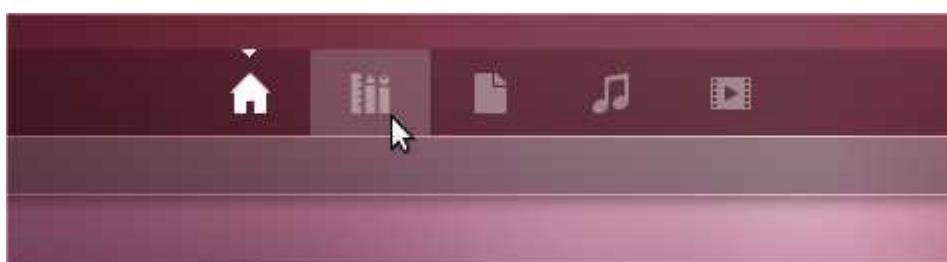
The screenshot shows the Ubuntu Software Center window. At the top, there are tabs for 'All Software' (selected), 'Installed', and 'History'. Below the tabs, the title 'Synaptic Package Manager' is displayed with a subtitle 'Install, remove and upgrade software packages'. It shows a rating of 4.5 stars from 163 reviews. A green checkmark icon indicates it is 'Installed on 2012-05-22'. To the right of the install date is a 'Remove' button. The main content area contains a brief description of Synaptic's functions and a link to its documentation. On the right side of the screen, a separate window titled 'Synaptic Package Manager' is open, showing a list of installed packages like 'libcurl3' and 'libgnome-menu-bin'. The bottom of the Software Center window has sections for 'Add-ons' and 'People Also Installed'.

**Add-ons**

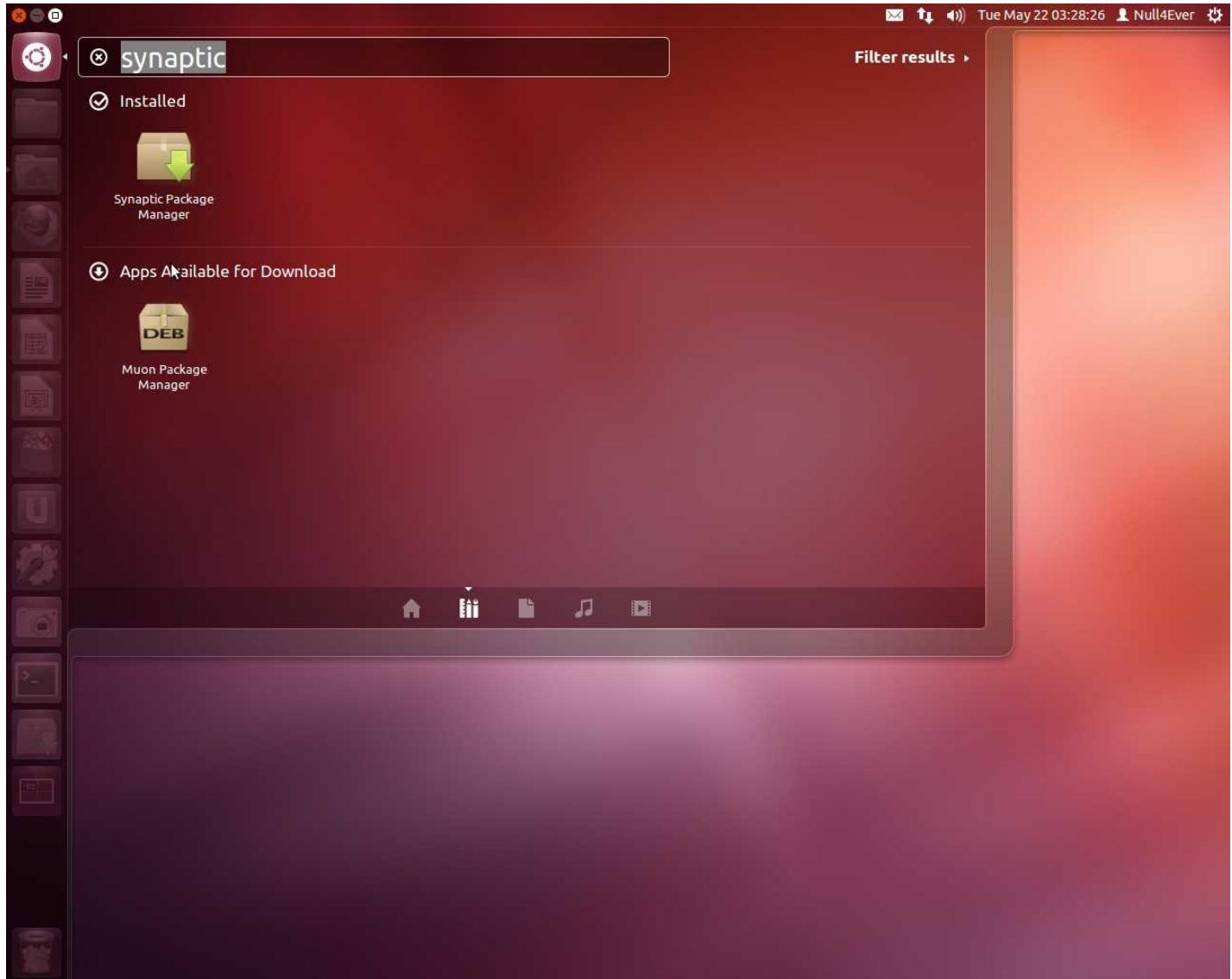
-  Transitional package for new kde-baseapps (kdebase-bin)
-  Perl interface to the 2.x series of the Gimp Toolkit library (libgtk2-perl)
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-  Program that can find unused packages, e.g. libraries (deborphan)
-  Debian Documentation Browser (dwww) 
-  Generates programs menu for all menu-aware applications (menu)

**People Also Installed**

Now, reopen the “Dash” and select the “library” icon.



If you didn't delete the word "synaptic" from the search entry field, you should then see the following selection showing that the Synaptic Package Manager is now installed.



So, start this utility by clicking on the following icon.



Once again, to use the Synaptic Package Manager, you've to authenticate yourself (Ha the famous Linux security). So enter your password and click on the [Authenticate] button..

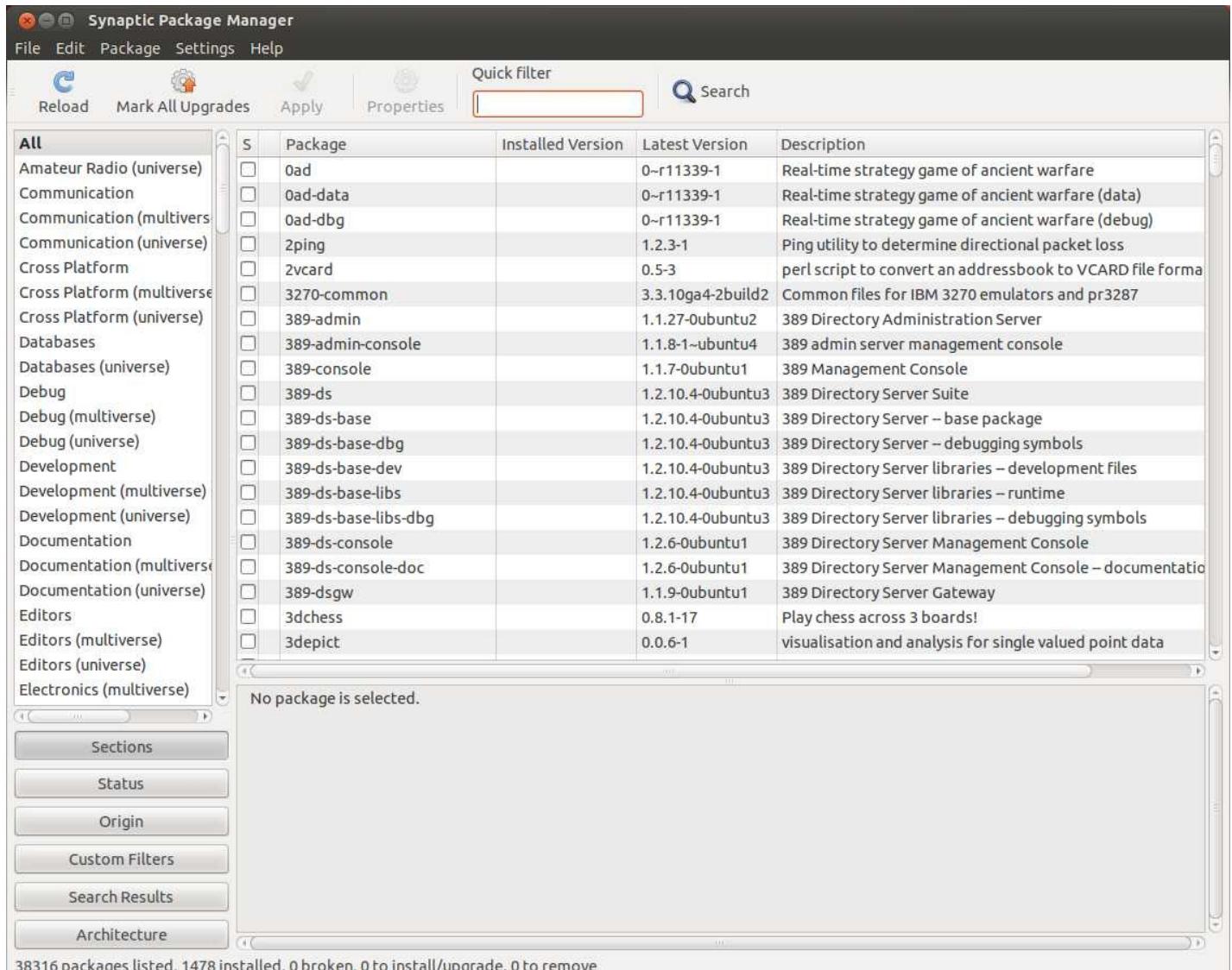


The Synaptic Package Manager will show a dialog like this.



Unless you absolutely need to see this boring dialog each and every times you'll start the Synaptic Package Manager, just click on the [Close] button without validating the "Show this dialog at startup" checkbox.

Then, the main Synaptic Package Manager main dialog looks like this.



From there, we're going to install all the components needed by QB64:

- ✓ libsdl-dev
- ✓ libsdl-net
- ✓ libsdl-mixer
- ✓ libsdl-ttf
- ✓ and timidity.

Note : the order of installation of these components is not important since this excellent utility will take care to install all the required dependencies!

Type the word "libsdl" into the "Quick filter" entry field.

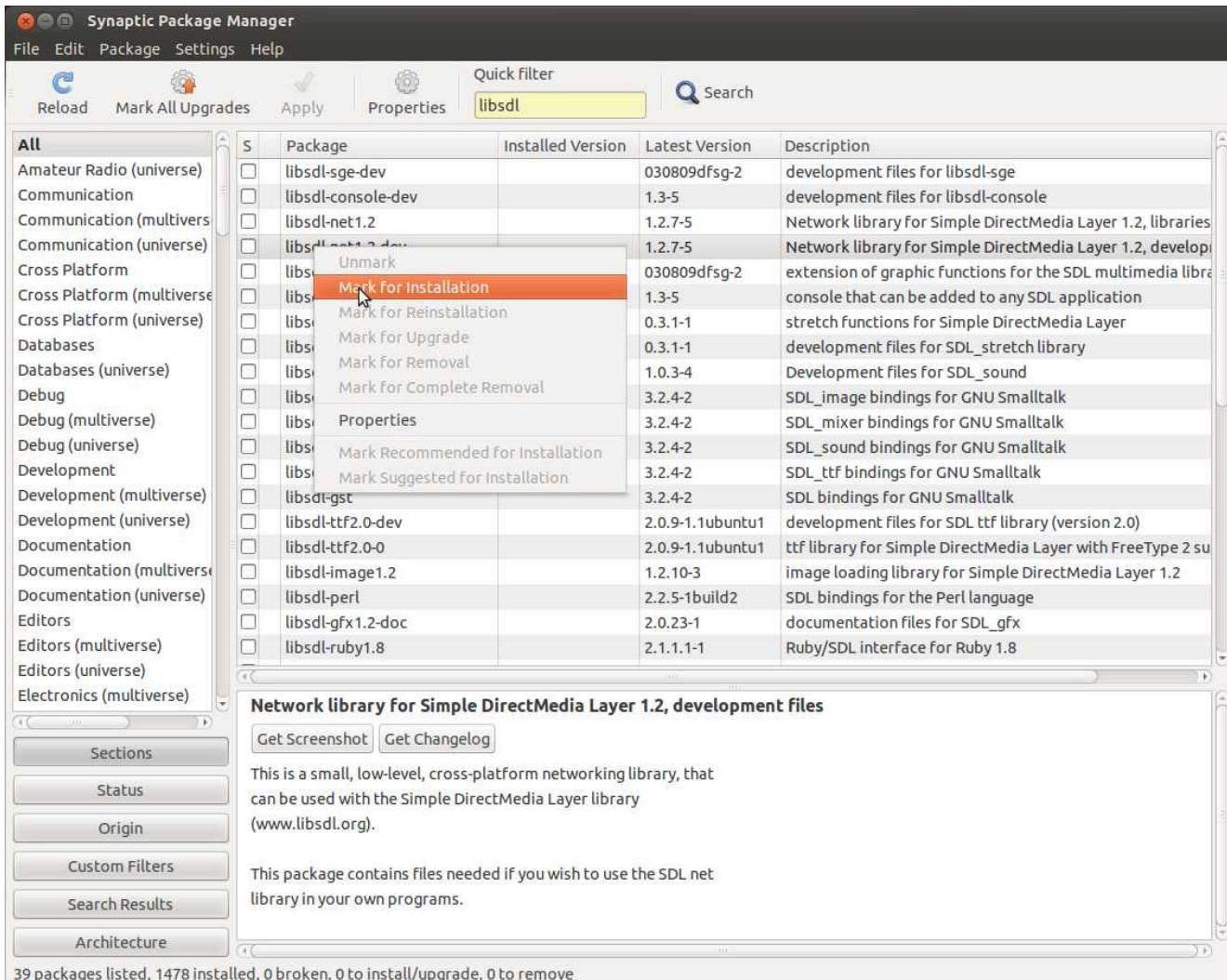
The screenshot shows the Synaptic Package Manager interface. The 'Quick filter' bar at the top has the text 'libsdl' entered. Below the filter, a table lists packages matching the search term. The table columns are: S, Package, Installed Version, Latest Version, and Description. The 'Installed Version' column for the first few packages is empty, indicating they are not installed. The 'Description' column provides a brief overview of each package's purpose. A message at the bottom left states 'No package is selected.' and the status bar at the bottom indicates '39 packages listed, 1478 installed, 0 broken. 0 to install/upgrade, 0 to remove'.

S	Package	Installed Version	Latest Version	Description
	libsdl-sge-dev		030809dfsg-2	development files for libsdl-sge
	libsdl-console-dev		1.3-5	development files for libsdl-console
	libsdl-net1.2		1.2.7-5	Network library for Simple DirectMedia Layer 1.2, libraries
	libsdl-net1.2-dev		1.2.7-5	Network library for Simple DirectMedia Layer 1.2, development
	libsdl-sge		030809dfsg-2	extension of graphic functions for the SDL multimedia library
	libsdl-console		1.3-5	console that can be added to any SDL application
	libsdl-stretch-0-3:i386		0.3.1-1	stretch functions for Simple DirectMedia Layer
	libsdl-stretch-dev:i386		0.3.1-1	development files for SDL_stretch library
	libsdl-sound1.2-dev		1.0.3-4	Development files for SDL_sound
	libsdl-image-gst		3.2.4-2	SDL_image bindings for GNU Smalltalk
	libsdl-mixer-gst		3.2.4-2	SDL_mixer bindings for GNU Smalltalk
	libsdl-sound-gst		3.2.4-2	SDL_sound bindings for GNU Smalltalk
	libsdl-ttf-gst		3.2.4-2	SDL_ttf bindings for GNU Smalltalk
	libsdl-gst		3.2.4-2	SDL bindings for GNU Smalltalk
	libsdl-ttf2.0-dev		2.0.9-1.1ubuntu1	development files for SDL ttf library (version 2.0)
	libsdl-ttf2.0-0		2.0.9-1.1ubuntu1	ttf library for Simple DirectMedia Layer with FreeType 2 support
	libsdl-image1.2		1.2.10-3	image loading library for Simple DirectMedia Layer 1.2
	libsdl-perl		2.2.5-1build2	SDL bindings for the Perl language
	libsdl-gfx1.2-doc		2.0.23-1	documentation files for SDL_gfx
	libsdl-ruby1.8		2.1.1.1-1	Ruby/SDL interface for Ruby 1.8

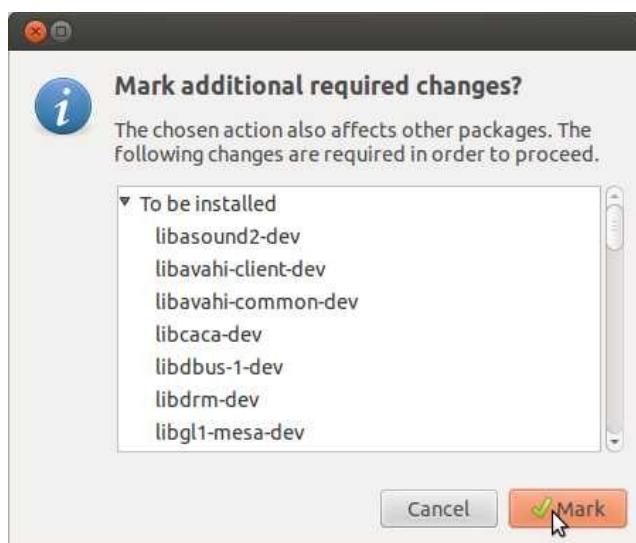
No package is selected.

39 packages listed, 1478 installed, 0 broken. 0 to install/upgrade, 0 to remove

Then select the “libsdl-net1.2-dev” option and click on the “Mark for installation” option of the dropdown menu.

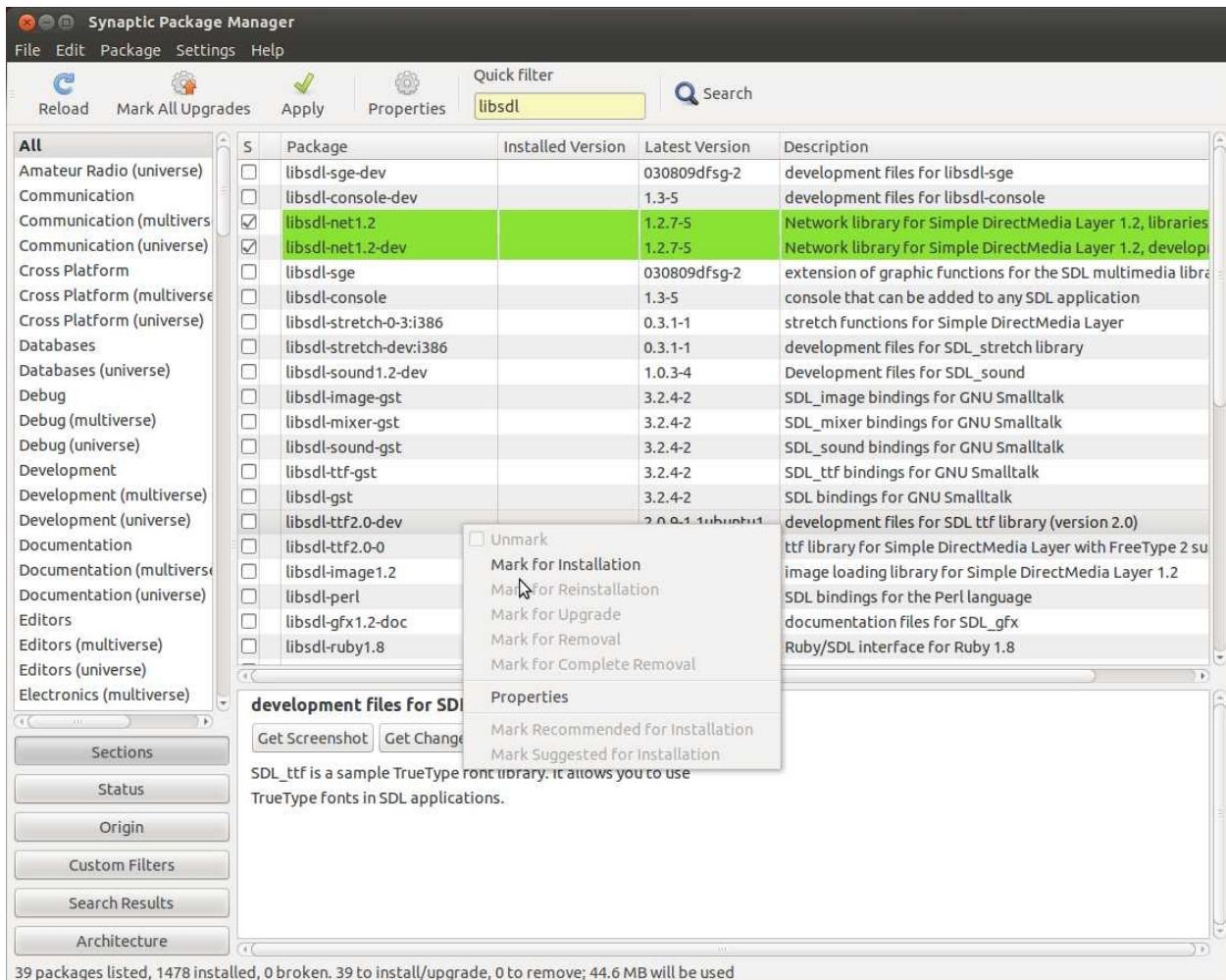


This will open a new dialog that shows all the dependencies to be installed. Just click on the [V Mark] button.

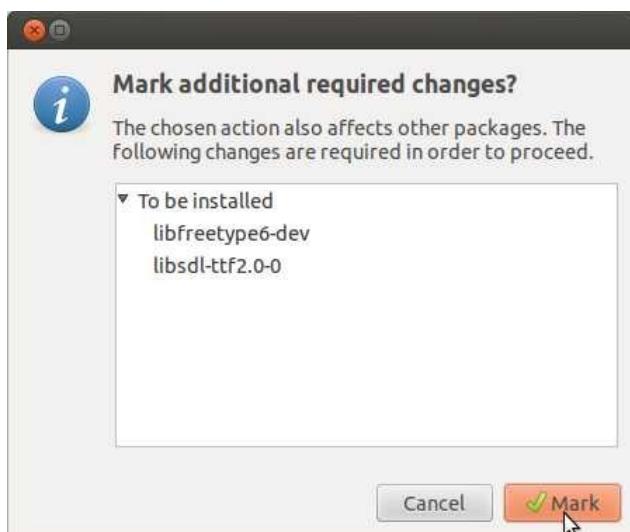


You can see that the previous selection of the sole “Libsdl-net1.2-dev” also checked the “libsdl-net1.2” package. So, it works nicely this Synaptic Package Manager utility doesn’t it?

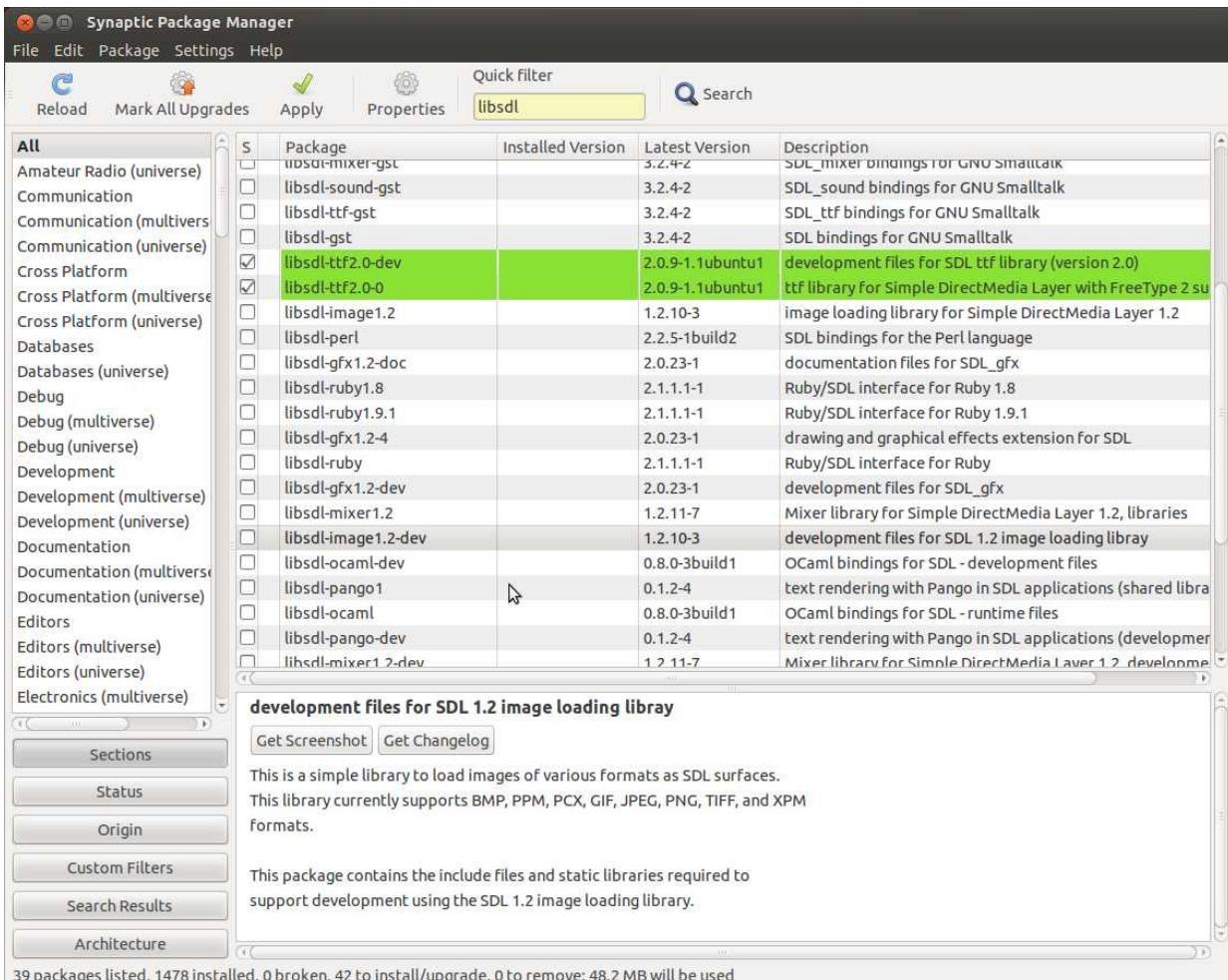
Then select the “libsdl-ttf2.0-dev” option and click on the “Mark for installation” option of the dropdown menu.



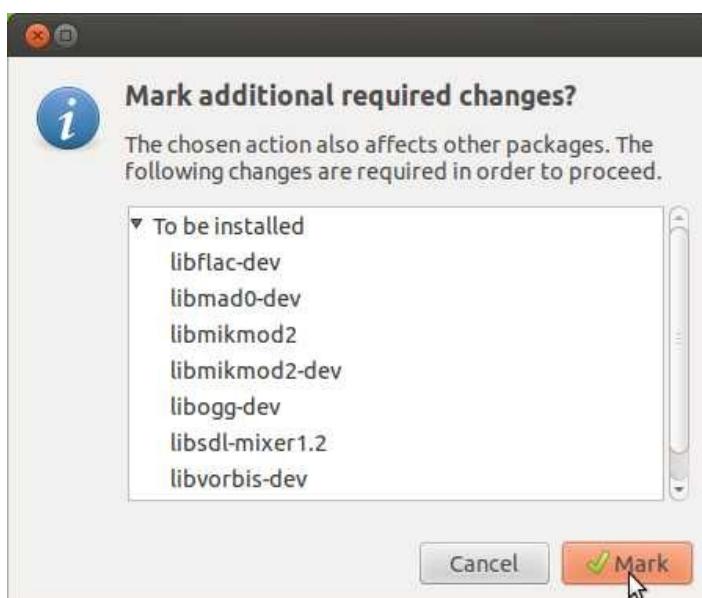
And click on the [V Mark] button!



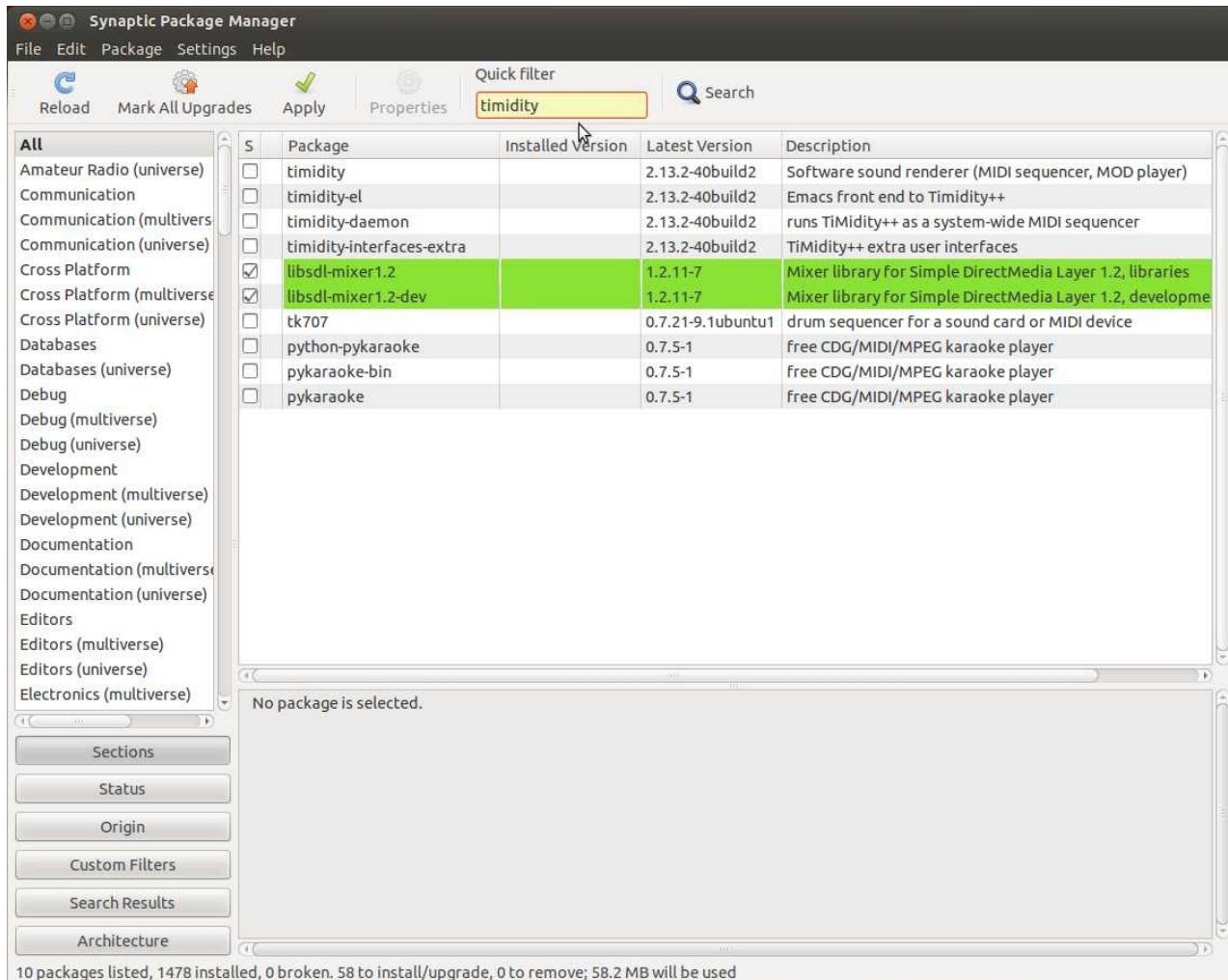
Then go down to the list to select the “libsdl-image1.2-dev” option and click on the “Mark for installation” option of the dropdown menu.



And (of course) once again click on the [✓ Mark] button of the second dialog (I know, this is boring... but if you prefer the geek's command lines... LOL).



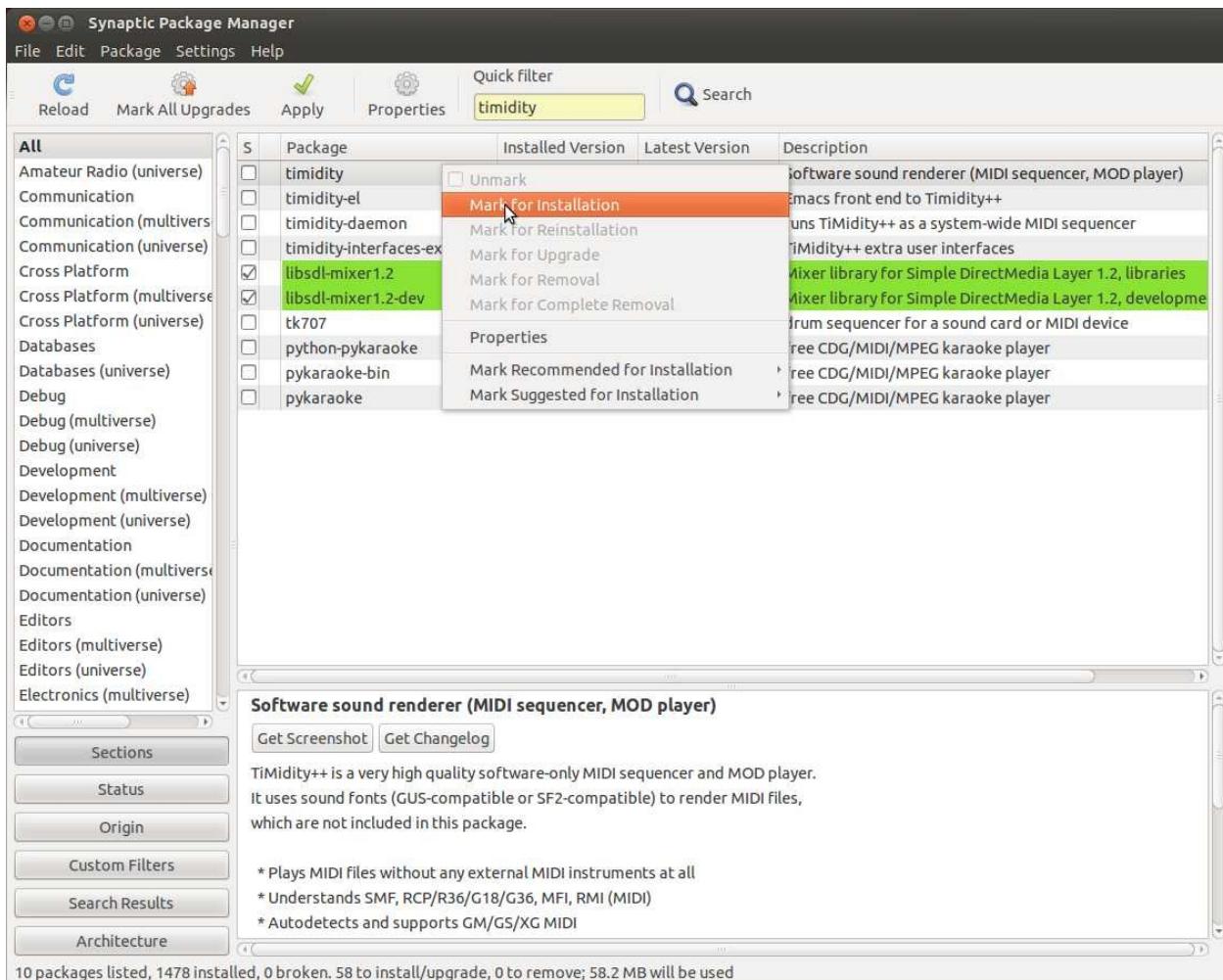
Then, type in the “Quick filter” entry field the word “timidity”



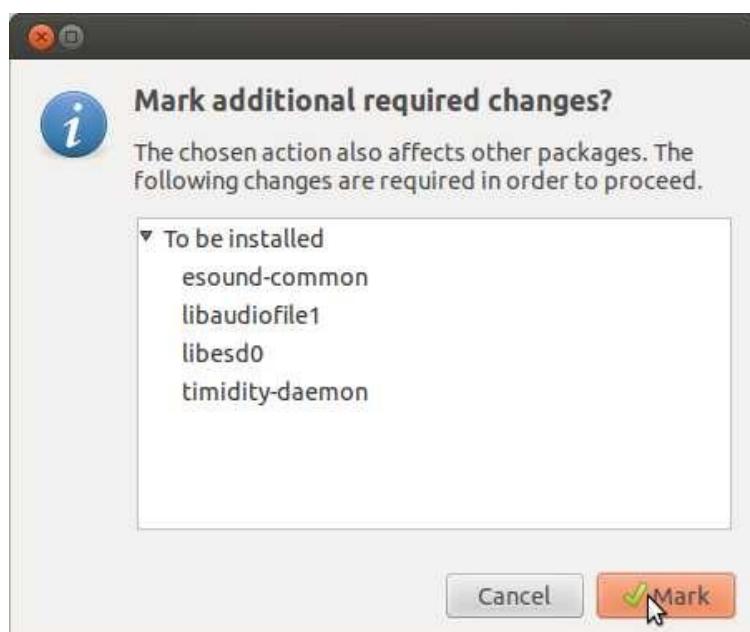
Guess what now?

Obviously you've to select the “timidity” package.

So, now I won't repeat- LOL ! Select the "Mark for installation" option from the dropdown menu..



and... click on the[V Mark] button of the second dialog.

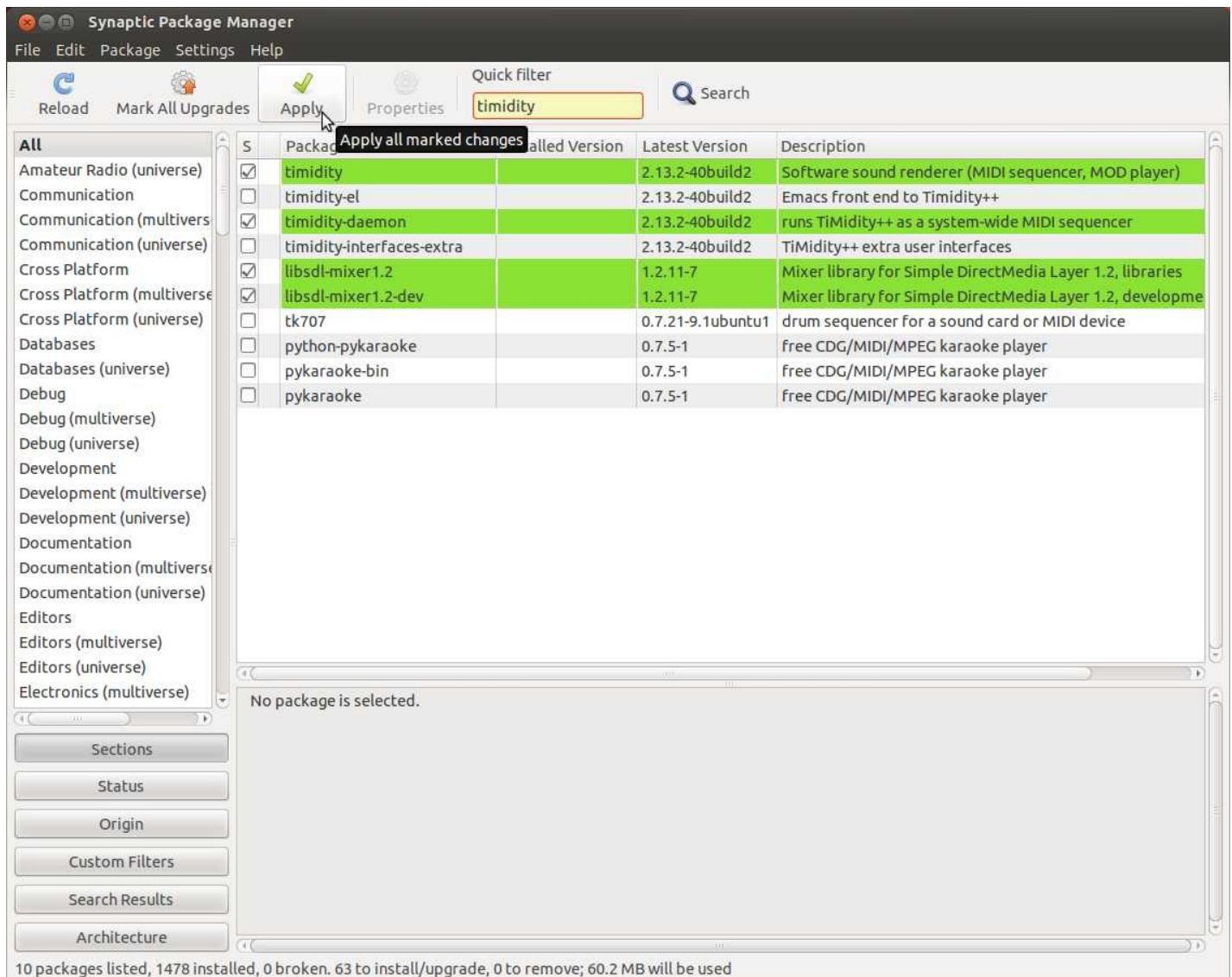


Now that you've selected all the components needed to use QB64, obviously you've to install them!

How to do so?

That's quite simple.

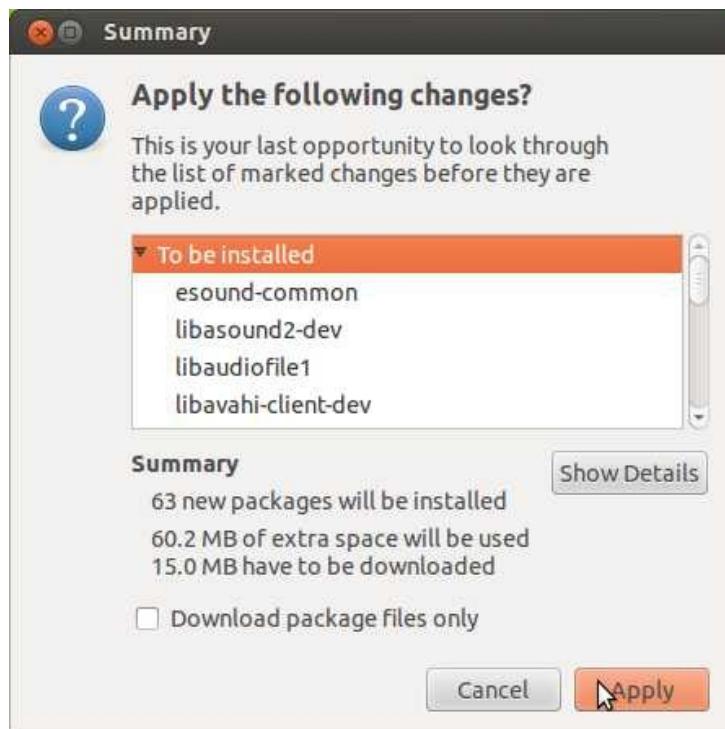
Just click on the [Apply] button of the main Synaptic Package Manager's tool bar.



This icon looks like this:



A new dialog will show all the packages to be installed. So, don't care about it (except if you're a Linux specialist to double check that the Synaptic Package Manager did its work right) and just click on the [Apply] button.

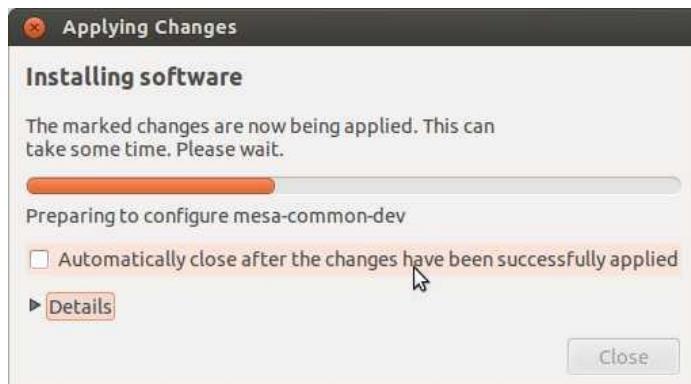


Then, wait for the packages to be downloaded...

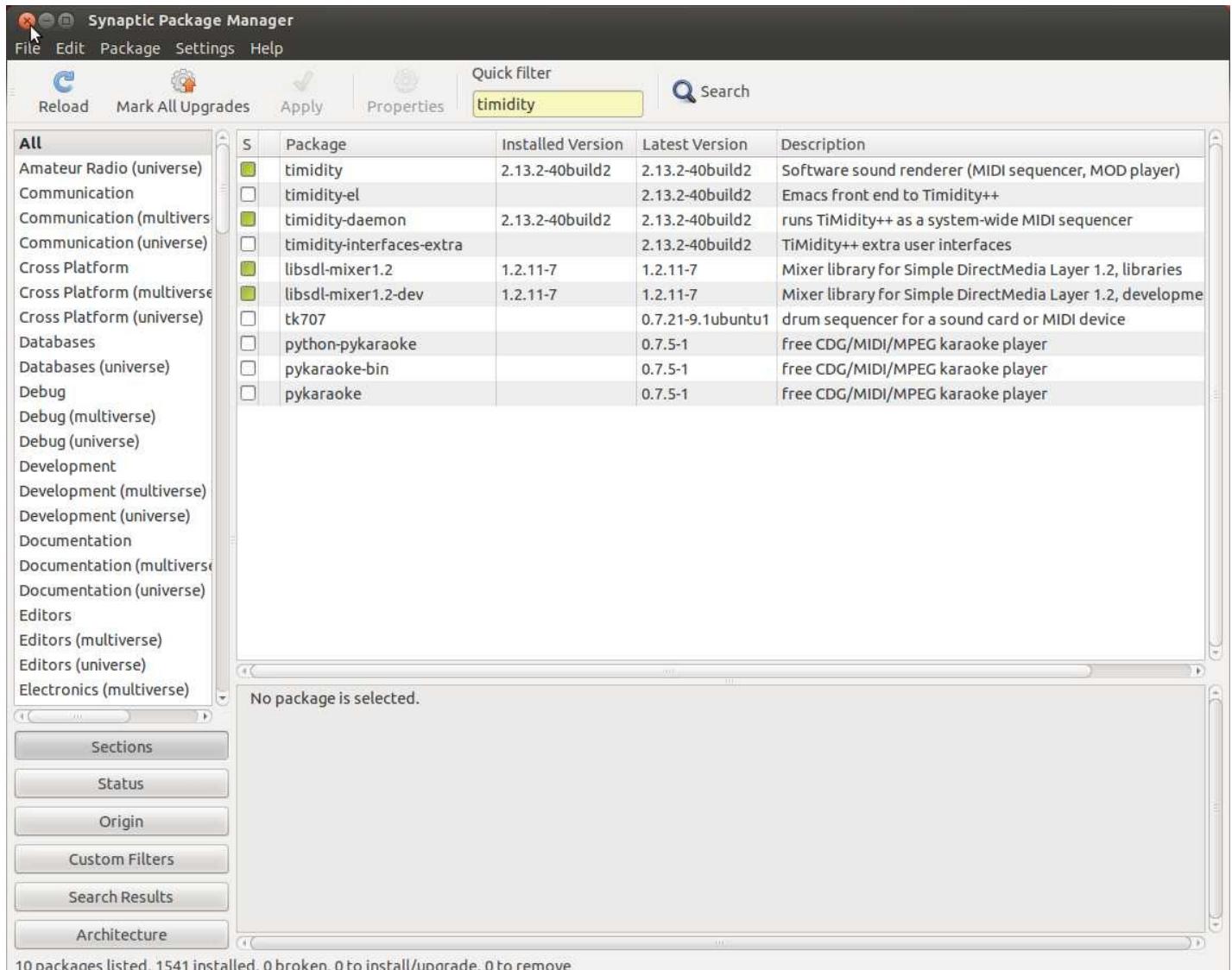


and installed!

Note : You may (should) also validate the "Automatically close after the changes been successfully applied" option!



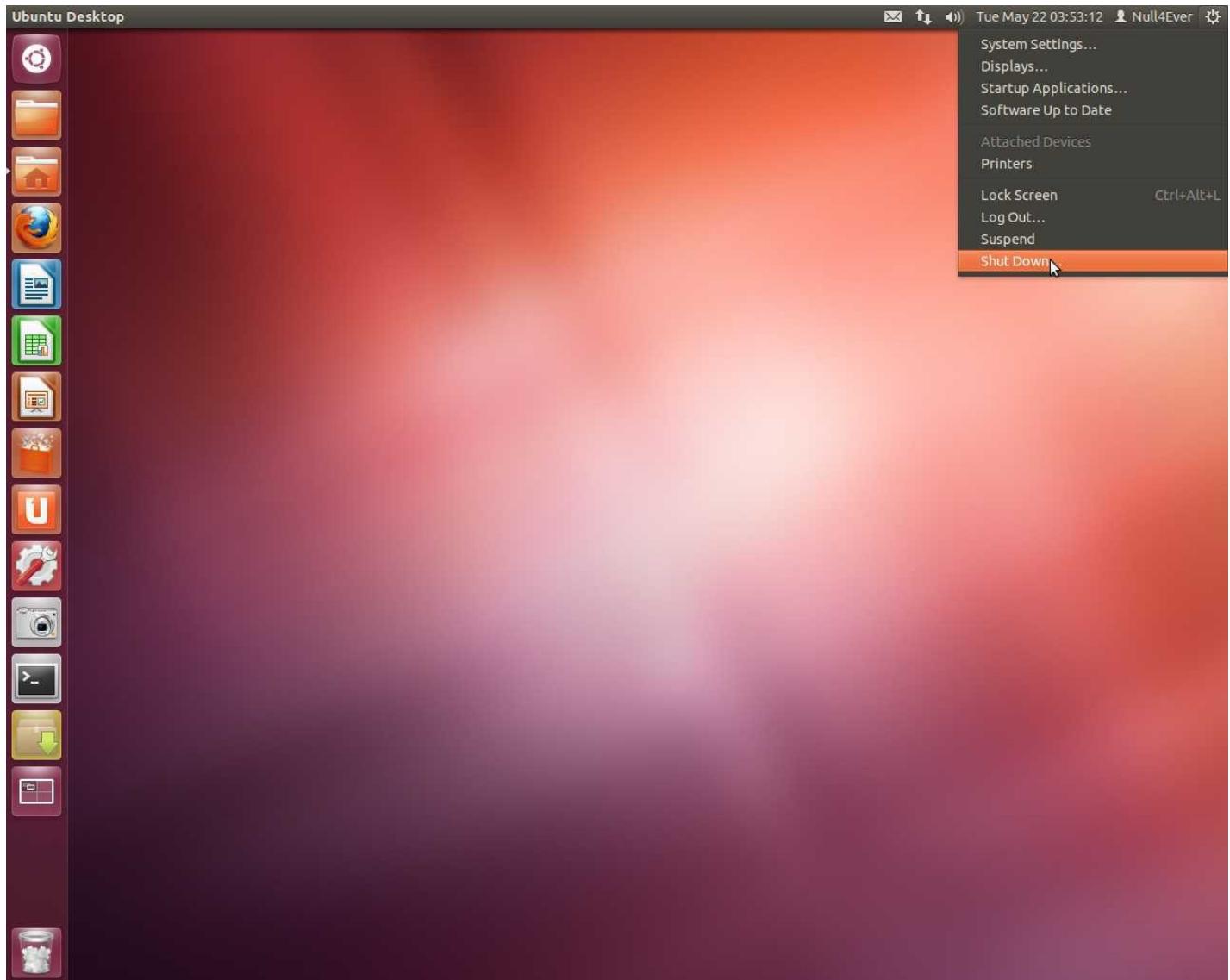
Then when all the packages are installed, close the Synaptic Package Manager utility.



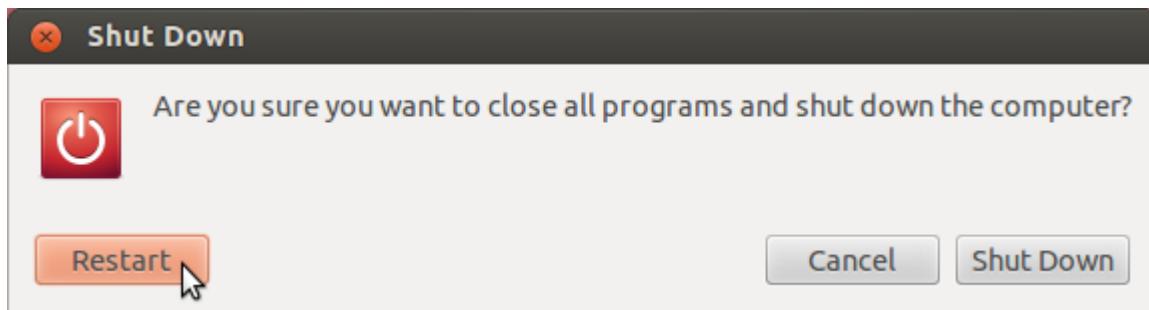
And now...

As if you were using Windows... LOL!

... PLEASE reboot your system !



This will open the following dialog where you've to click on the [Restart] button.



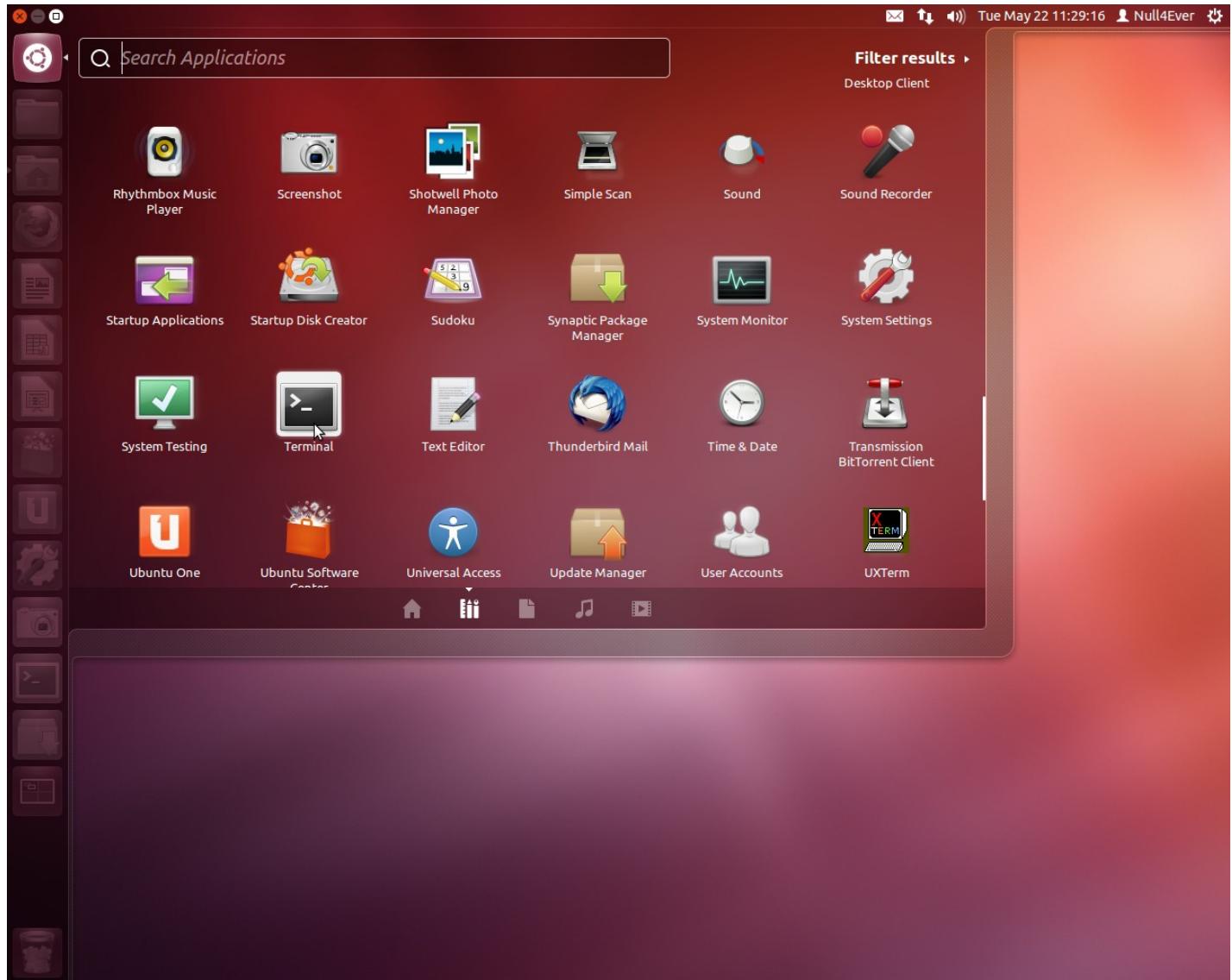
Note: Hey, what did you expect? (A sweet eye's blink to the last Uma Thurman's commercial for Schweppes - LOL)!

So yes, I do know. It's boring like if you're using Windows! No more... but obviously no less!

Once your system is restarted, reopen the “Dash” using the famous and marvelous library icon...



and search the Terminal almost down to the list (a window that opens a command prompt like with DOS or Windows)!



Note: Yes I know that I said I won't be using the command lines, and I was a little bit lying since I didn't find a way to change the access rights of a folder only using the graphical interface. Sorry for that. However, don't be afraid since it's quite easy if (and only if) you know the right command (and how to use them)! So, I'm here to help.

So, start a terminal session by clicking on the following icon.

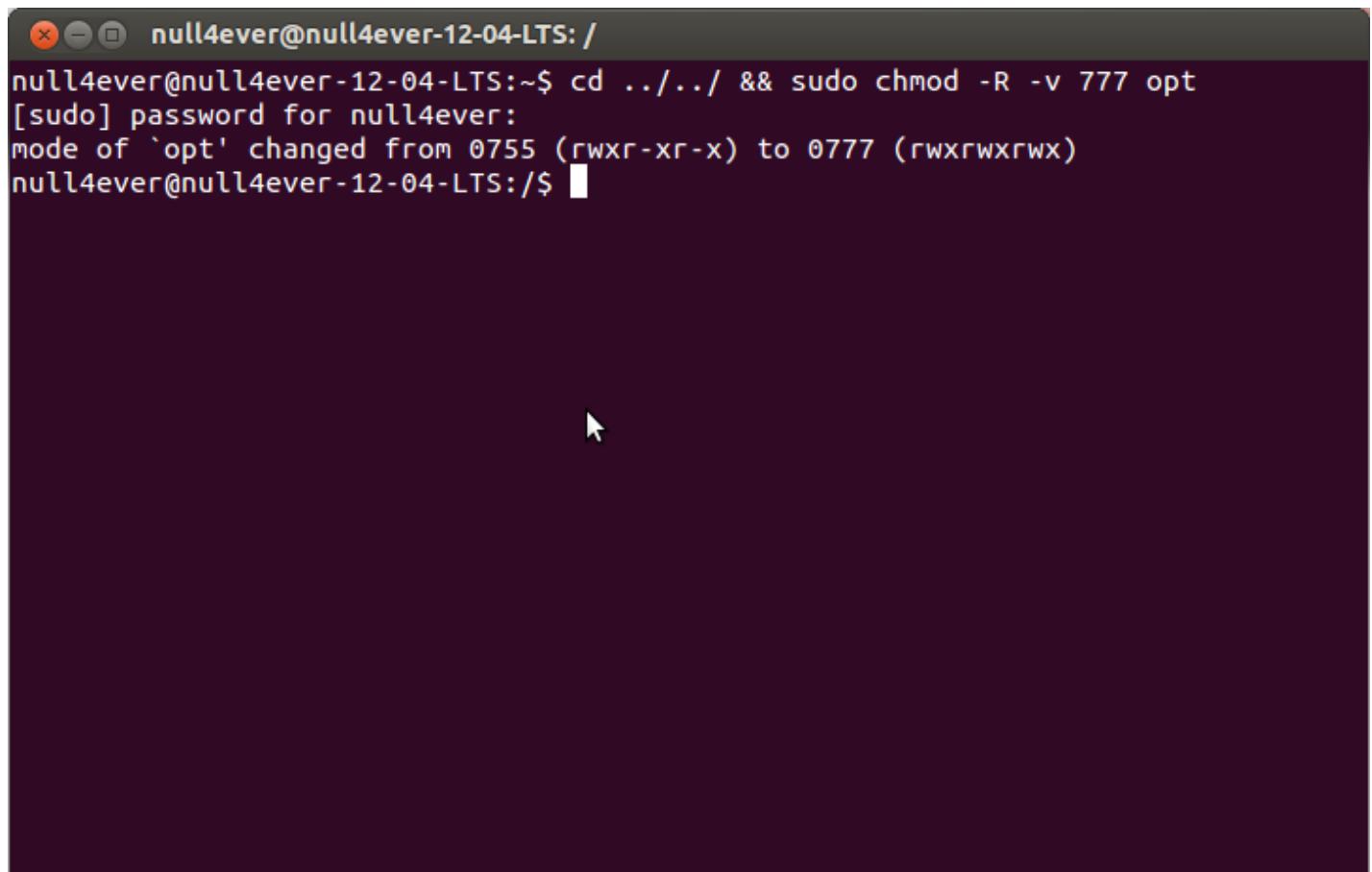


Since I fairly suggest installing QB64 into the “/opt” folder, you’ll have to modify its access rights.

To do so, type the following command line: “cd ../../ && sudo chmod -R -v 777 opt” and strike the [Enter] key of your keyboard.

The part of this command line (“cd ../../”) will place you on the root of your system, the second part of this command line (“&&”) will tell that you need to do something else after moving to the root and the last part of this command line (“sudo chmod -R -v 777 opt”) will ask you to enter your password (that’s not displayed even by small “\*” for each character typed on your keyboard).

If you’re successful, you should get the following response.

A screenshot of a terminal window titled "null4ever@null4ever-12-04-LTS: /". The window contains the following text:

```
null4ever@null4ever-12-04-LTS:~$ cd ../../ && sudo chmod -R -v 777 opt
[sudo] password for null4ever:
mode of 'opt' changed from 0755 (rwxr-xr-x) to 0777 (rwxrwxrwx)
null4ever@null4ever-12-04-LTS:/$
```

A mouse cursor is visible at the bottom center of the terminal window.

Now, you've to download the QB64 product.

Start Firefox from the “Dashboard” and enter the following address:

“www.qb64.net/forum/index.php?board=2.0”

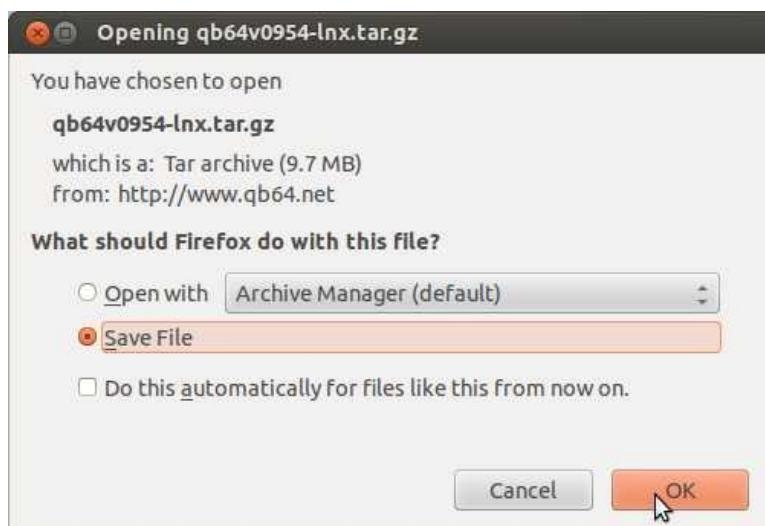
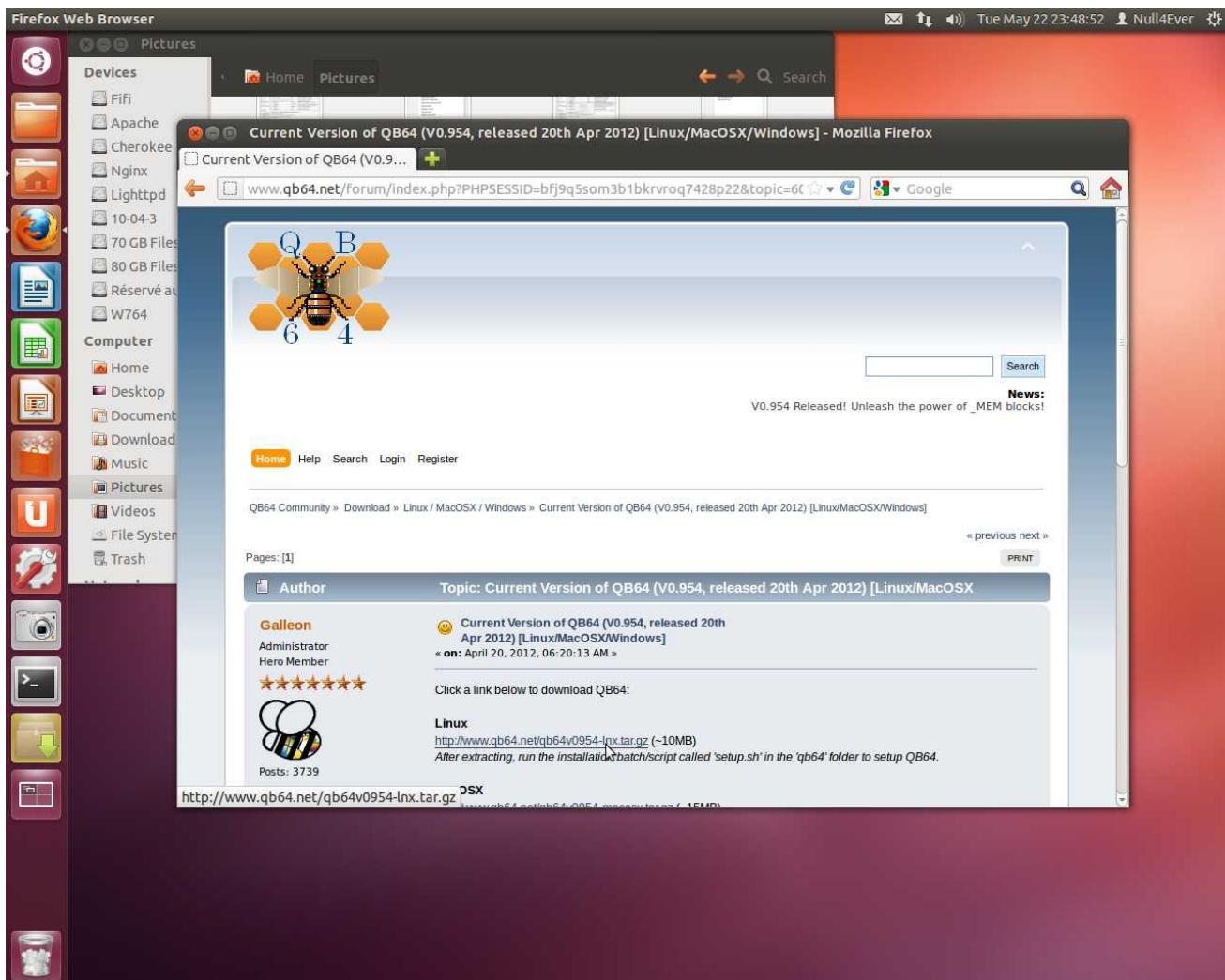
The screenshot shows a Mozilla Firefox window with the title bar "Linux / MacOSX / Windows - Mozilla Firefox". The address bar contains "www.qb64.net/forum/index.php?board=2.0". The main content area displays the QB64 forum index. At the top left is the QB64 logo featuring a bee on hexagonal cells with the letters Q, B, 6, and 4. To the right of the logo is a search bar and a "Search" button. Below the search bar, a news banner reads "V0.954 Released! Unleash the power of \_MEM blocks!". A navigation menu at the top includes "Home", "Help", "Search", "Login", and "Register". Below the menu, a breadcrumb trail shows "QB64 Community » Download » Linux / MacOSX / Windows". A pagination link "Pages: [1] 2" is visible. The main content is a table listing forum topics. The columns are "Subject / Started by", "Replies / Views", and "Last post". The topics listed are:

Subject / Started by	Replies / Views	Last post
<a href="#">Current Version of QB64 (V0.954, released 20th Apr 2012) [Linux/MacOSX/Windows] Started by Galleon</a>	0 Replies 3234 Views	April 20, 2012, 06:20:13 AM by Galleon
<a href="#">Older Version of QB64 (V0.953, released 10th Mar 2012) [Linux/MacOSX/Windows] Started by Galleon</a>	0 Replies 4546 Views	March 10, 2012, 03:02:54 AM by Galleon
<a href="#">Older Version of QB64 (V0.951, released 18th Feb 2012) Started by Galleon</a>	0 Replies 2329 Views	February 20, 2012, 04:50:16 AM by Galleon
<a href="#">Older Version of QB64 (V0.942, released 10th Sept 2011) [32 BIT &amp; 64BIT Linux] Started by Galleon</a>	0 Replies 3455 Views	September 09, 2011, 04:07:10 AM by Galleon
<a href="#">Older Version of QB64 (V0.942, released 10th Sept 2011)</a>	0 Replies 14186 Views	September 07, 2011, 04:21:03 AM by Galleon

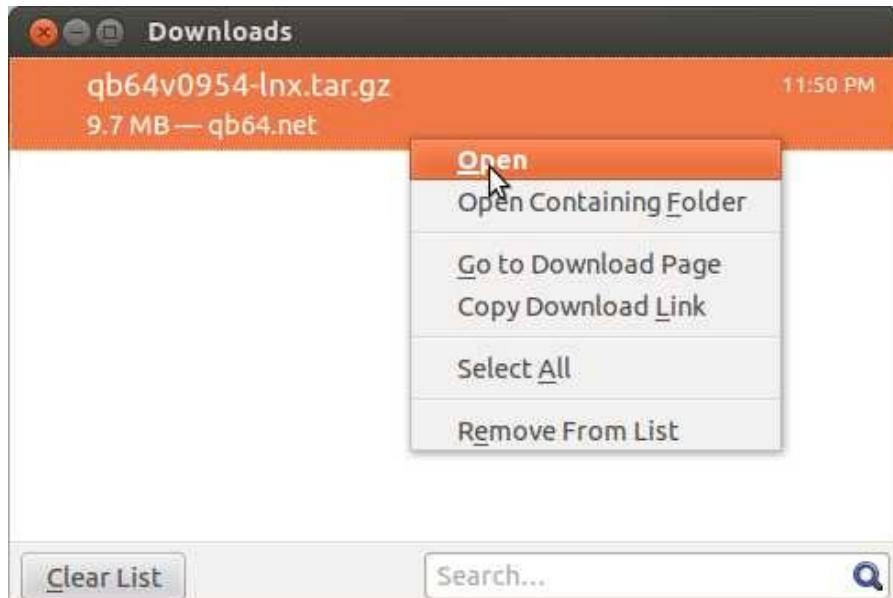
A link "http://www.qb64.net/forum/inde...3b1bkrvraq7428p22&topic=6007.0" is shown at the bottom of the table.

From this web page, select the first available current QB64 version (at the time of editing this installation user manual, it's the v0.954 released 20<sup>th</sup> April 2012).

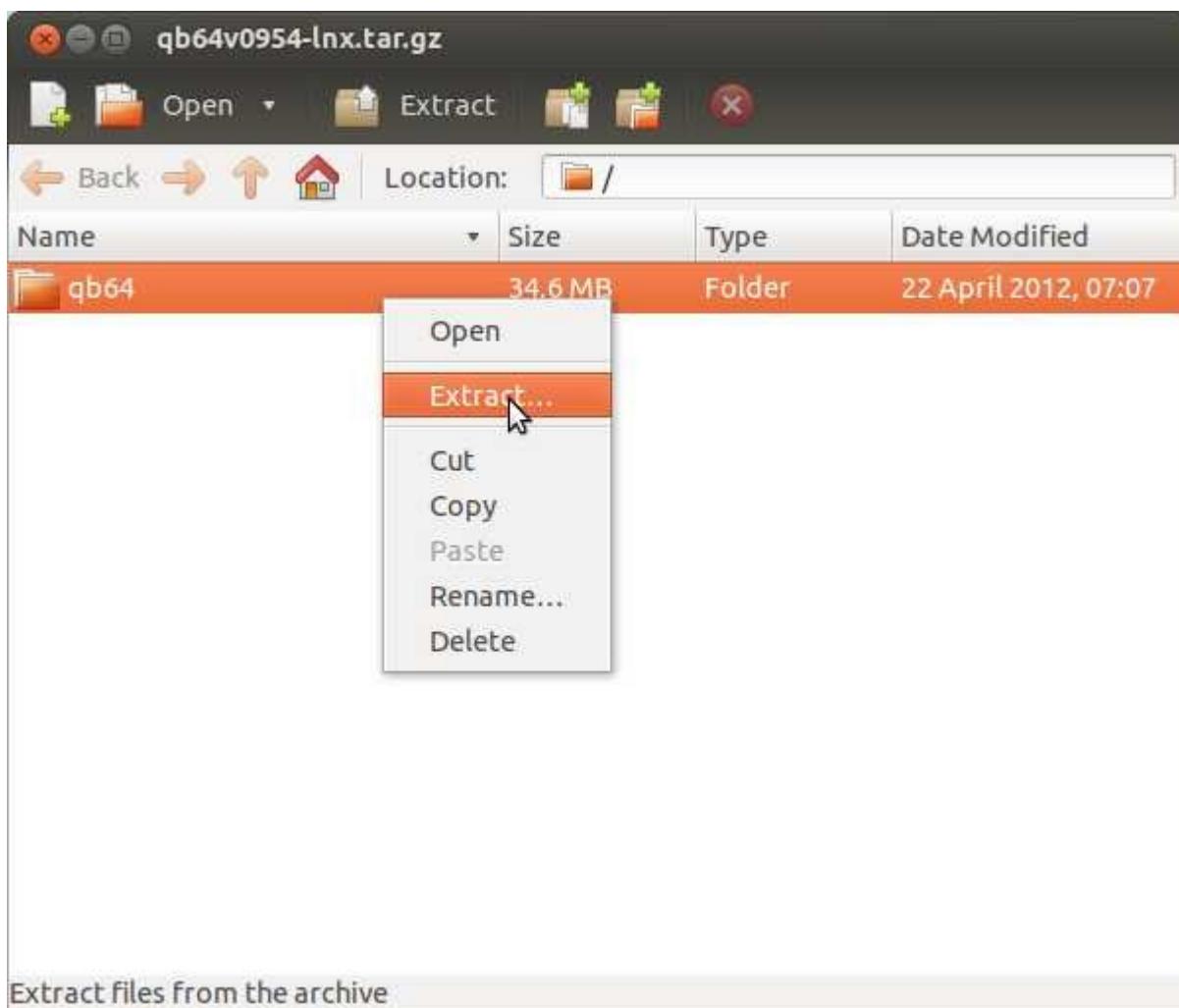
Then, download and save the Linux package.



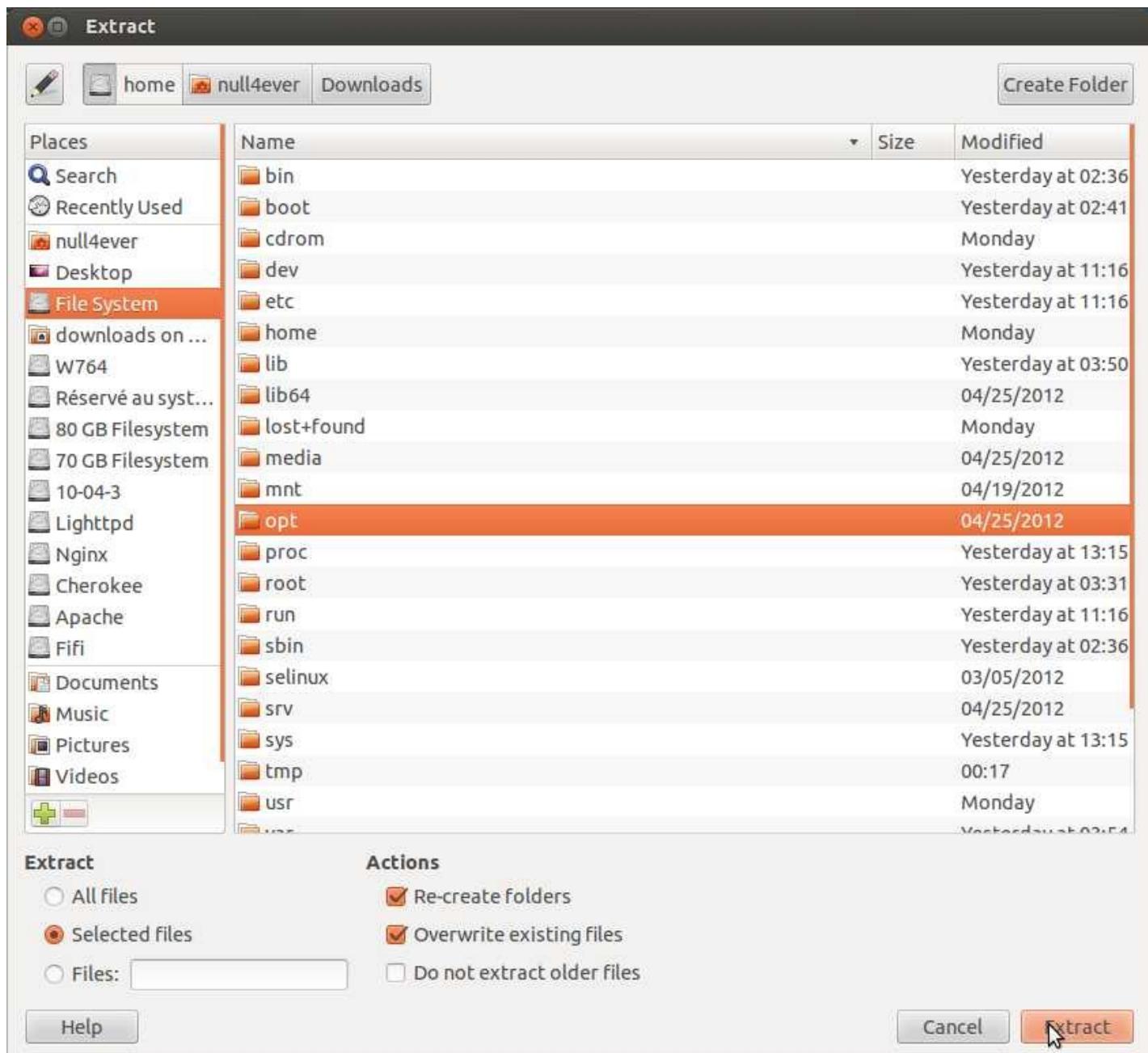
Once the file is downloaded, click on the package's name and select the “Open” option of the dropdown menu.



This will open the following dialog. Then, select the “qb64” icon and the “Extract...” option of the dropdown menu.



This will open the next dialog. On the left column, select the “File System” icon and on the right column select the “opt” icon. Then, click on the “Extract” button.



Once the QB64 file is successfully downloaded into the “/opt” folder, you’ll have to use AGAIN the terminal to perform the QB64 installation.

Yes, I know, I lied twice about using the Geek’s command lines!

But don’t worry, this doesn’t hurt!

So restart a terminal session using the usual icon of the “dash” library.



Then type the following command:

```
"cd ../../opt/qb64 && sh setup.sh"
```

This should show you the following message.

```
null4ever@null4ever-12-04-LTS: ~
null4ever@null4ever-12-04-LTS:~$ cd ../../opt/qb64 && sh setup.sh
QB64 Setup

Make sure the following packages are installed before continuing:
(SDL packages should be version 1.2 or 1.2.???)  

libsdl-dev  

libsdl-image-dev  

libsdl-mixer-dev  

libsdl-net-dev  

libsdl-ttf-dev (may report as version 2.0)  

timidity (only required if playing MIDI files)

Press any key to continue...  


```

As requested, press any key of your keyboard to continue the installation process.

```
null4ever@null4ever-12-04-LTS: ~
null4ever@null4ever-12-04-LTS:~$ cd ../../opt/qb64 && sh setup.sh
QB64 Setup

Make sure the following packages are installed before continuing:
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timidity (only required if playing MIDI files)

Press any key to continue...

Checking for existance of 'g++'
*****
setup.sh: 25: setup.sh: g++: not found
*****
The above line should read 'g++: no input files'. If it doesn't you need to install the g++ compiler before continuing.

Press any key to continue...
```

OOPS ! It's my fault. I forgot to install the G++ compiler that QB64 needs.

WARNING !

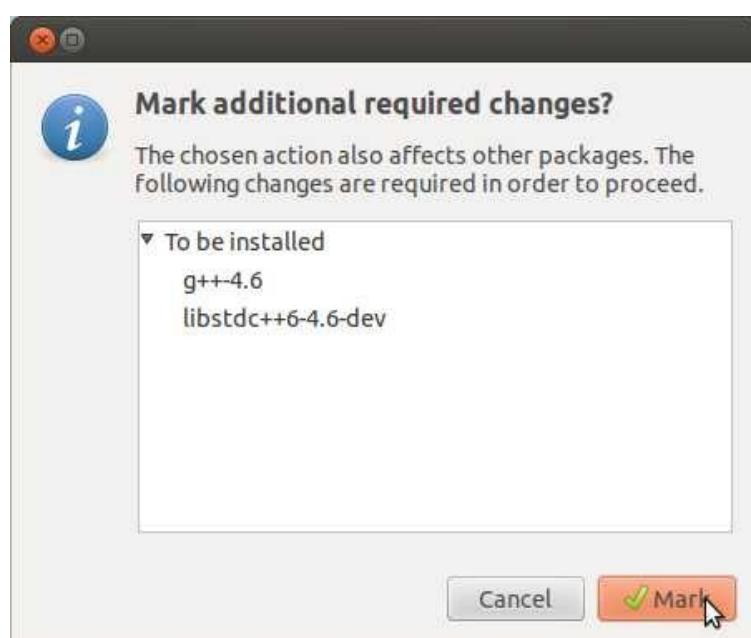
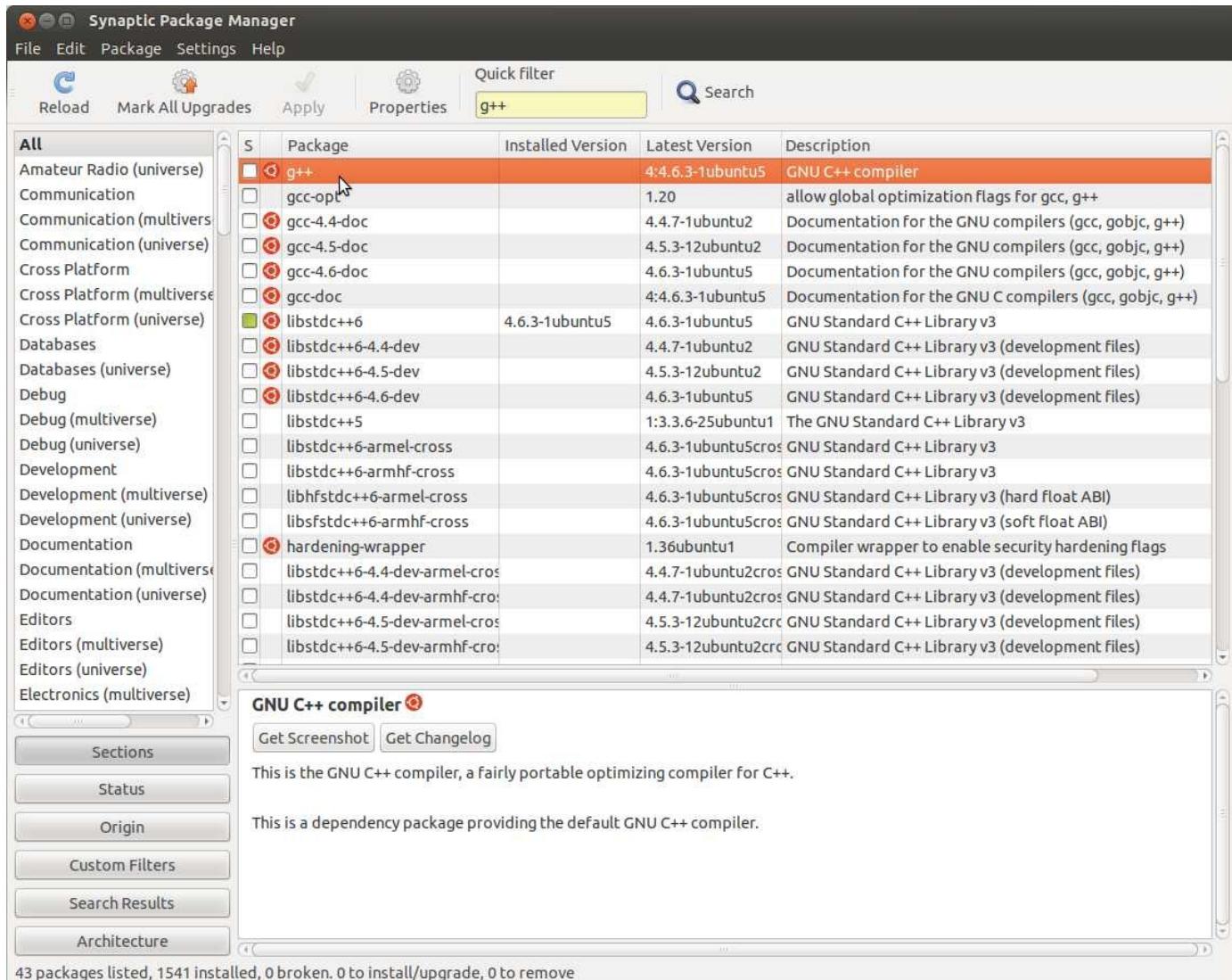
The message says: Checking for existence of “g++” and the response is “setup.sh: 25 setup.sh: g++ not found”!

So, PLEASE, DO NOT PRESS ANY KEY to continue, and PLEASE don't close that Terminal session!

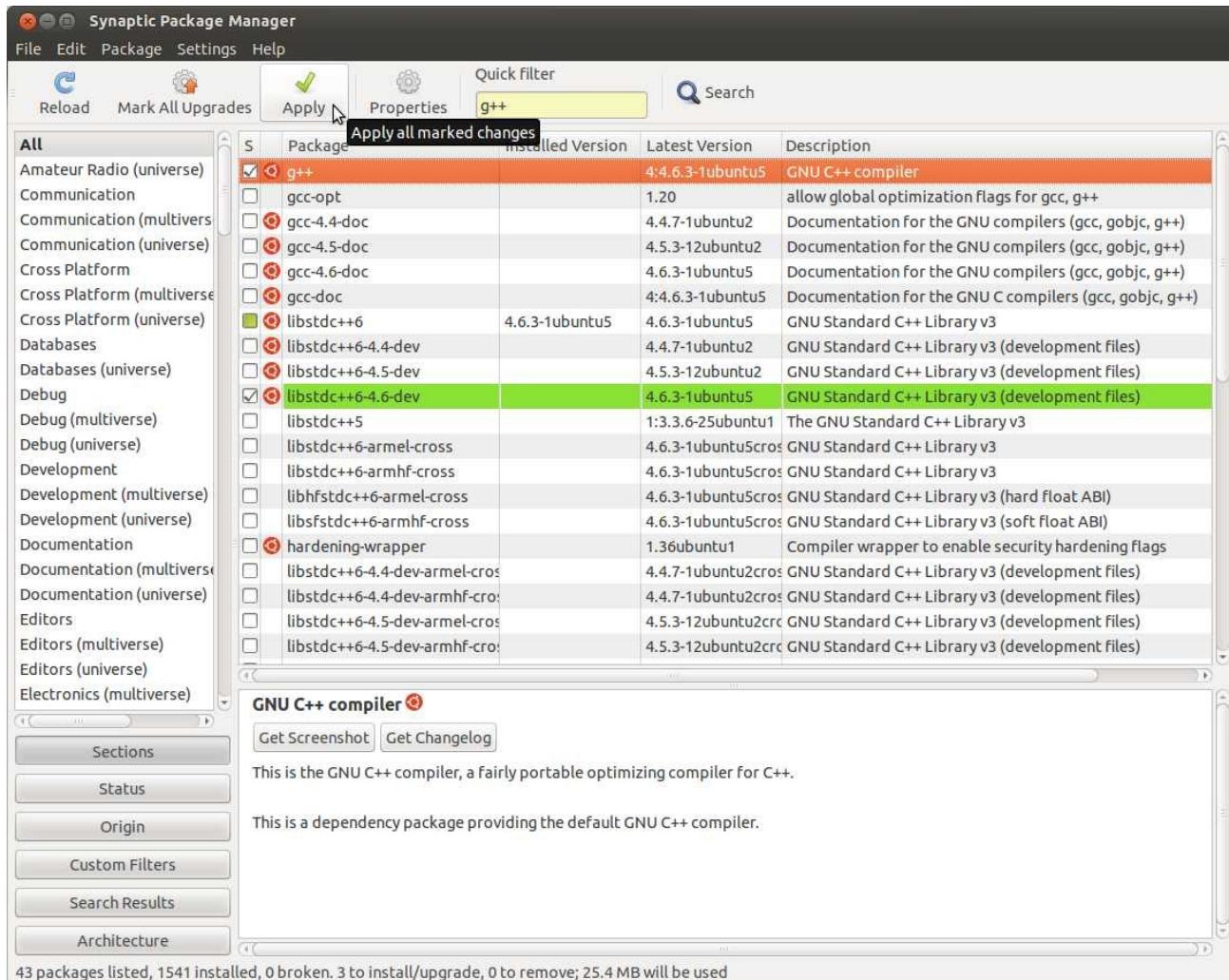
So, from the “Dash” restart the Synaptic Package Manager.



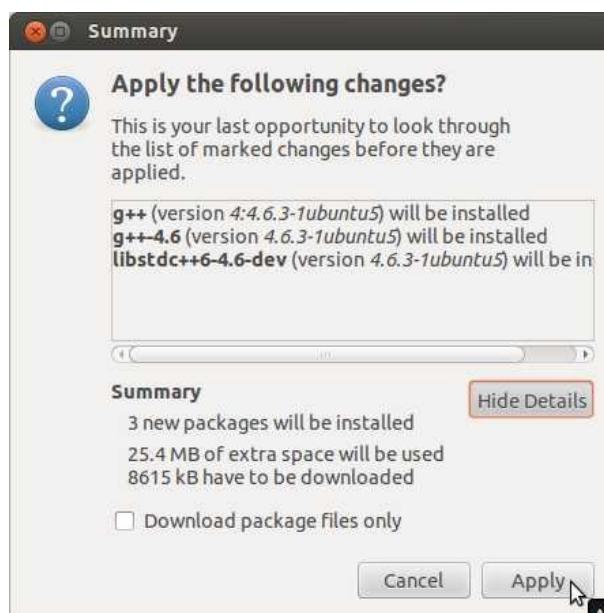
Then type the word “g++” in the “Quick filter” entry field. Select and install the “g++” package.



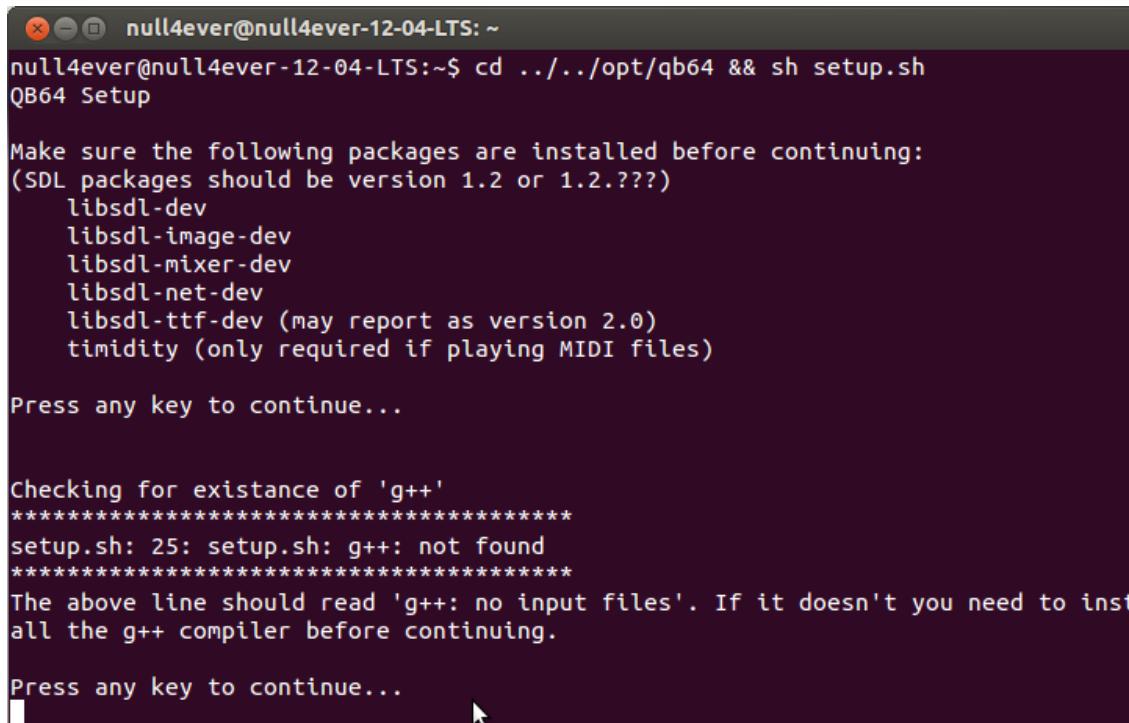
Click of the [Apply] icon of the main Synaptic Package Manager tool bar



And click on the [Apply] button of the following dialog.



Once the G++ compiler is installed, close the Synaptic Package Manager tool and go back to your Terminal session...



```
null4ever@null4ever-12-04-LTS:~$ cd ../../opt/qb64 && sh setup.sh
QB64 Setup

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timidity (only required if playing MIDI files)

Press any key to continue...

Checking for existance of 'g++'  

*****  

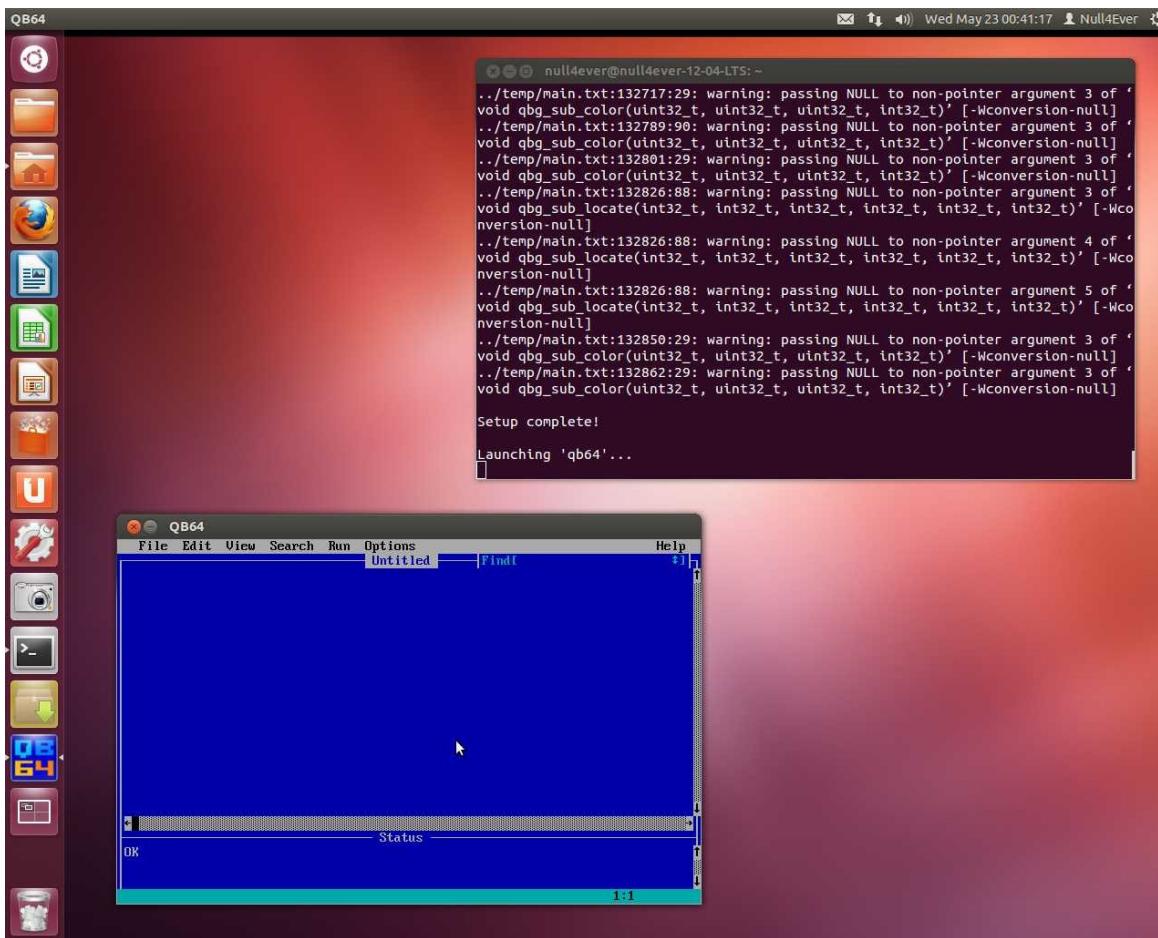
setup.sh: 25: setup.sh: g++: not found  

*****  

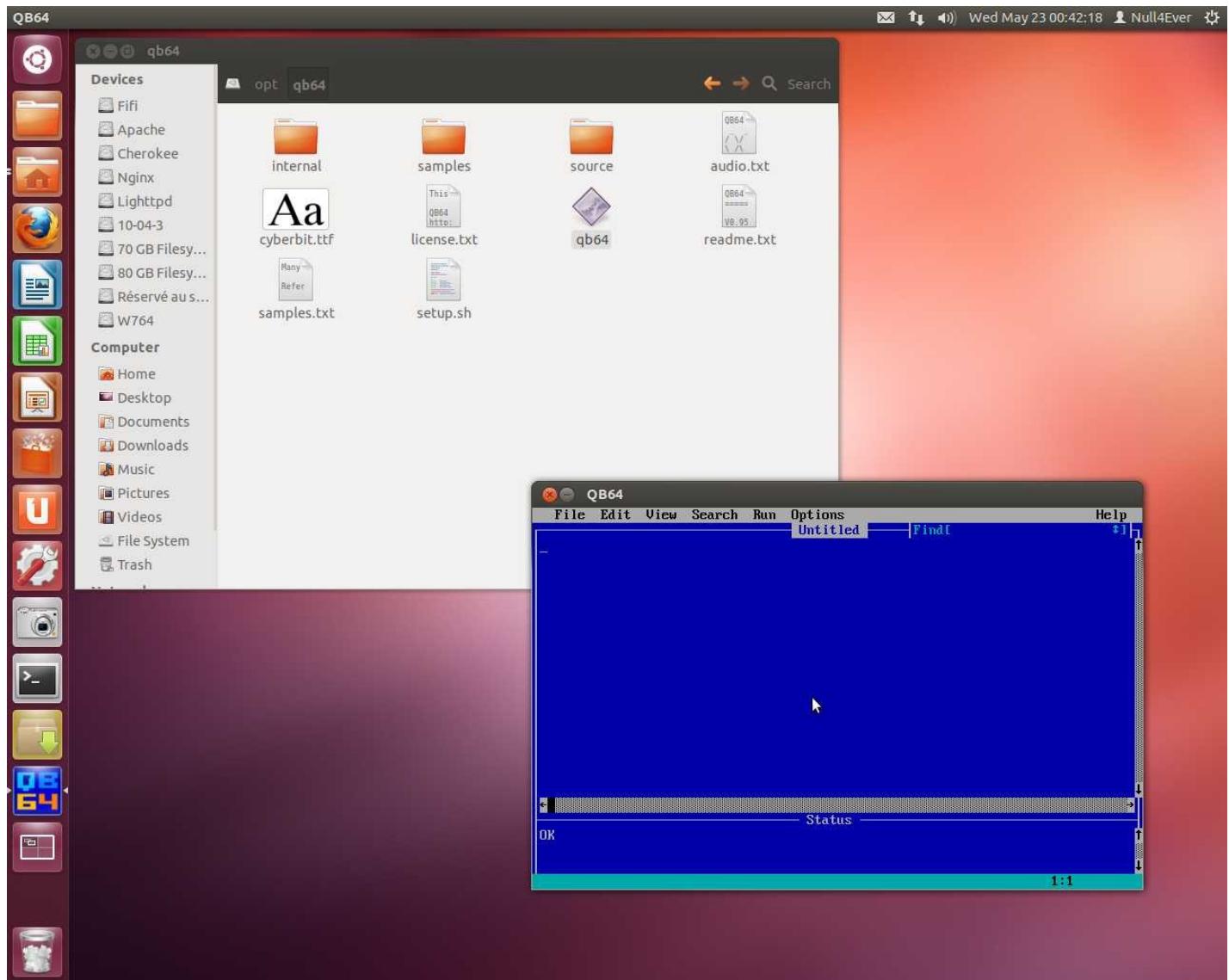
The above line should read 'g++: no input files'. If it doesn't you need to install the g++ compiler before continuing.

Press any key to continue...
```

And now, press any key to continue... and... MIRACLE, the installation will finish smoothly starting a QB64 session!



When you'll close both the QB64 session and the Terminal, you'll be able to start QB64 directly from its location that is (with my example) into the 'File System/opt/qb64' folder.



I hope this short Installation QB64 user manual will help and make you have some smiles with my tiny trolls to Windows.

Please don't hesitate to contact me if you need the .doc or .docx original files (I don't use Open Office) as well as both the .png and smaller .jpg images if you need to make an HTML Wiki like tutorial.

I'll provide the next improved install process to use QB64 with G-WAN to create dynamic Web2 sites and rich web applications using QB64 as the main programming server side language as soon as our dear Galleon will find some times to modify a little bit the new "-z" parameter o fit the minimum mandatory needs of G-WAN.

Looking forward.

And have fun using QB64 with Precise Pangolin.

### Very Personal Note:

I truly don't care about politely trolling a little bit about Ubuntu vs Windows since both of these two OSes have theirs pros and cons (not only in term of performances where Ubuntu largely beats Windows by several orders of magnitude but also in term of friendly user interface where Windows 7 is largely nicer than Precise Pangolin but also about the availability to find specific products not having an equivalent on Linux such as Autocad)

The day Adobe will propose Premiere and a Flash driver that works smoothly with Linux, when Thunderbird will be flexible and powerful like Outlook is and when my Gran'Ma will be able to use Linux exclusively using a graphical user interface without any need to start a Terminal and to type Geek's command lines, I may definitely quit the MSFT operating system!

Until that day (that may never ever arrive), I'll continue to use both of them, especially with the VMware player tool that allows me to integrate Windows into Linux (and vice & versa).

And please, thanks to MSFT closed source code, don't talk to me about the big joke named Wine!

Further, I must admit to be very disappointed with that new Long Term Service release that wasn't sufficiently tested before to be released (a lot of stuff aren't working anymore such as the Java JDK).

Not only that version is almost twice bigger than the previous 10.04 LTS but it's also twice (or even more) slower.

I'll continue to use Ubuntu as long as their versions will stay ahead of Windows for Web Servers and Web Application Servers (especially if you take a look at the ultimate Redmond's joke named IIS7), but I don't feel too comfortable with the new path used by Canonical, especially since they hired their new "lead technical guru" !

Now, I know there are a lot of other Linux distributions such as Debian, Kubuntu or Open Suze (and even more) but you know like me that when you've invested a bunch of time to one of them, it's a little bit difficult to migrate right away to a new solution (that's, by the way from my personal view point, the sole and main problem of the wide and wild Linux adoption by the mass vs. Windows).

Where is my good, safe, user friendly and damned well performing OS/2! LOL! I want it back in a 64 bit release with its up to now never ever equaled sole and true full real object oriented WorkPlace Shell!

Persist and sign!

Cheers.